

EPAM Systems, Inc.
Form 10-Q
November 05, 2018

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2018

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number: 001-35418

EPAM SYSTEMS, INC.
(Exact Name of Registrant as Specified in its Charter)

Delaware	22-3536104
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

41 University Drive, Suite 202	18940
Newtown, Pennsylvania	
(Address of principal executive offices) (Zip code)	
267-759-9000	
(Registrant's telephone number, including area code)	

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☒

Accelerated filer ☐

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Non-accelerated filer ☐ (Do not check if a smaller reporting company) Smaller reporting company ☐
Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☒

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Title of Each Class	Outstanding as of October 31, 2018
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Common Stock, par value \$0.001 per share	54,009,372 shares
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EPAM SYSTEMS, INC.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements (Unaudited)

EPAM SYSTEMS, INC. AND SUBSIDIARIES

CONDENSED CONSOLIDATED BALANCE SHEETS

(Unaudited)

(In thousands, except share and per share data)

	As of September 30, 2018	As of December 31, 2017
Assets		
Current assets		
Cash and cash equivalents	\$685,108	\$582,585
Accounts receivable, net of allowance of \$3,039 and \$1,186, respectively	282,276	265,639
Unbilled revenues	129,683	86,500
Prepaid and other current assets, net of allowance of \$50 and \$45, respectively	29,646	23,196
Employee loans, current, net of allowance of \$23 and \$0, respectively	2,289	2,113
Total current assets	1,129,002	960,033
Property and equipment, net	99,465	86,419
Employee loans, noncurrent, net of allowance of \$0 and \$0, respectively	1,456	2,097
Intangible assets, net	52,669	44,511
Goodwill	144,987	119,531
Deferred tax assets	61,905	24,974
Other noncurrent assets, net of allowance of \$0 and \$140, respectively	14,498	12,691
Total assets	\$1,503,982	\$1,250,256
Liabilities		
Current liabilities		
Accounts payable	\$8,422	\$5,574
Accrued expenses and other current liabilities	98,442	89,812
Due to employees	52,405	38,757
Deferred compensation due to employees	9,174	5,964
Taxes payable	52,530	40,860
Total current liabilities	220,973	180,967
Long-term debt	25,028	25,033
Taxes payable, noncurrent	50,242	59,874
Other noncurrent liabilities	11,804	9,435
Total liabilities	308,047	275,309
Commitments and contingencies (Note 11)		
Stockholders' equity		
Common stock, \$0.001 par value; 160,000,000 authorized; 54,011,579 and 53,003,420 shares issued, 53,991,844 and 52,983,685 shares outstanding at September 30, 2018 and December 31, 2017, respectively	54	53
Additional paid-in capital	530,837	473,874
Retained earnings	699,568	518,820
Treasury stock	(177) (177
Accumulated other comprehensive loss	(34,347) (17,623

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Total stockholders' equity	1,195,935	974,947
Total liabilities and stockholders' equity	\$1,503,982	\$1,250,256

The accompanying notes are an integral part of the unaudited condensed consolidated financial statements.

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EPAM SYSTEMS, INC. AND SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME

(Unaudited)

(In thousands, except share and per share data)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Revenues	\$468,186	\$377,523	\$1,337,981	\$1,051,151
Operating expenses:				
Cost of revenues (exclusive of depreciation and amortization)	301,081	239,369	867,890	667,231
Selling, general and administrative expenses	92,490	81,190	272,110	240,062
Depreciation and amortization expense	9,319	7,174	26,457	20,866
Other operating expenses, net	736	542	4,030	2,096
Income from operations	64,560	49,248	167,494	120,896
Interest and other income, net	1,941	1,416	2,442	2,802
Foreign exchange (loss)/gain	(514)	(77)	1,069	(1,470)
Income before provision for/(benefit from) income taxes	65,987	50,587	171,005	122,228
Provision for/(benefit from) income taxes	369	7,953	(9,286)	18,594
Net income	\$65,618	\$42,634	\$180,291	\$103,634
Foreign currency translation adjustments, net of tax	(2,118)	5,703	(14,643)	16,640
Unrealized net loss on cash-flow hedging instruments, net of tax	(74)	—	(2,081)	—
Comprehensive income	\$63,426	\$48,337	\$163,567	\$120,274
Net income per share:				
Basic	\$1.22	\$0.81	\$3.37	\$2.00
Diluted	\$1.15	\$0.77	\$3.19	\$1.90
Shares used in calculation of net income per share:				
Basic	53,851,865	52,545,155	53,485,339	51,806,700
Diluted	56,962,867	55,228,781	56,599,638	54,661,196

The accompanying notes are an integral part of the unaudited condensed consolidated financial statements.

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EPAM SYSTEMS, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)
(In thousands)

	Nine Months Ended September 30,	
	2018	2017
Cash flows from operating activities:		
Net income	\$180,291	\$103,634
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization expense	26,457	20,866
Bad debt expense	1,765	79
Deferred taxes	(36,372)	1,386
Stock-based compensation expense	46,736	39,920
Other	(3,434)	(3,496)
Changes in operating assets and liabilities:		
(Increase)/decrease in operating assets:		
Accounts receivable	(16,258)	(24,396)
Unbilled revenues	(41,544)	(42,540)
Prepaid expenses and other assets	(1,765)	2,036
Increase/(decrease) in operating liabilities:		
Accounts payable	1,574	1,885
Accrued expenses and other liabilities	9,625	18,725
Due to employees	4,009	5,939
Taxes payable	(1,996)	(2,458)
Net cash provided by operating activities	169,088	121,580
Cash flows from investing activities:		
Purchases of property and equipment	(27,465)	(16,881)
Employee housing loans issued	(264)	(618)
Proceeds from repayments of employee housing loans	1,213	1,897
Decrease/(increase) in time deposits, net	418	(408)
Acquisition of businesses, net of cash acquired	(50,264)	(6,810)
Other investing activities, net	(1,471)	(1,304)
Net cash used in investing activities	(77,833)	(24,124)
Cash flows from financing activities:		
Proceeds from stock option exercises	32,007	44,315
Payments of withholding taxes related to net share settlements of restricted stock units	(7,068)	(3,088)
Proceeds from debt (Note 6)	—	25,000
Repayment of debt (Note 6)	(3,485)	(25,089)
Other financing activities, net	(603)	(922)
Net cash provided by financing activities	20,851	40,216
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(8,660)	10,435
Net increase in cash, cash equivalents and restricted cash	103,446	148,107
Cash, cash equivalents and restricted cash, beginning of period	582,855	364,664
Cash, cash equivalents and restricted cash, end of period	\$686,301	\$512,771

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EPAM SYSTEMS, INC. AND SUBSIDIARIES
 CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
 (Unaudited)
 (In thousands)
 (Continued)

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the condensed consolidated balance sheets:

	As of September 30, 2018	As of December 31, 2017
Balance sheet classification		
Cash and cash equivalents	\$ 685,108	\$582,585
Restricted cash in Prepaid and other current assets	56	91
Restricted cash in Other noncurrent assets	1,137	179
Total restricted cash	1,193	270
Total cash, cash equivalents and restricted cash	\$ 686,301	\$582,855

The accompanying notes are an integral part of the unaudited condensed consolidated financial statements.

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NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Unaudited)

(In thousands, except share and per share data)

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

EPAM Systems, Inc. (the “Company” or “EPAM”) is a leading global provider of digital platform engineering and software development services to clients located around the world, primarily in North America, Europe, Asia and Australia. The Company has expertise in various industries, including software and hi-tech, financial services, business information and media, travel and hospitality, retail and distribution and life sciences and healthcare. The Company is incorporated in Delaware and headquartered in Newtown, PA.

Basis of Presentation — The accompanying unaudited condensed consolidated financial statements of EPAM have been prepared in accordance with generally accepted accounting principles in the United States (“GAAP”) and Article 10 of Regulation S-X under the Securities Exchange Act of 1934, as amended. The condensed consolidated financial statements include the financial statements of EPAM Systems, Inc. and its subsidiaries with all intercompany balances and transactions eliminated.

These unaudited condensed consolidated financial statements and accompanying notes should be read in conjunction with the Company’s audited consolidated financial statements and the notes thereto for the year ended December 31, 2017 included in its Annual Report on Form 10-K. The preparation of these condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in these condensed consolidated financial statements and accompanying notes. Actual results could differ from those estimates, and such differences may be material to the condensed consolidated financial statements.

Operating results for the interim periods are not necessarily indicative of results that may be expected to occur for the entire year. In management’s opinion, all adjustments considered necessary for a fair presentation of the accompanying unaudited condensed consolidated financial statements have been included, and all adjustments are of a normal and recurring nature.

Adoption of New Accounting Standards

Unless otherwise discussed below, the adoption of new accounting standards did not have an impact on the Company’s consolidated financial position, results of operations, and cash flows.

Revenue Recognition — Effective January 1, 2018, the Company adopted the new accounting standard ASU 2014-09, Revenue from Contracts with Customers (Topic 606) as amended using the modified retrospective method. The standard effectively replaced previously existing revenue recognition guidance (Topic 605) and requires entities to recognize revenue to depict the transfer of promised goods or services in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services as well as requires additional disclosure about the nature, amount, timing and uncertainty of revenues and cash flows arising from customer contracts, including significant judgments and changes in judgments.

The following table summarizes the cumulative effect of adopting Topic 606 using the modified retrospective method of adoption as of January 1, 2018:

	Balance as of December 31, 2017	Adjustments Due to Topic 606	Balance as of January 1, 2018
Balance Sheet			
Assets			
Unbilled revenues	\$86,500	\$ (78)	\$86,422
Deferred tax assets	\$24,974	\$ (173)	\$24,801
Liabilities			
Accrued expenses and other current liabilities	\$89,812	\$ (708)	\$89,104
Stockholders’ equity			
Retained earnings	\$518,820	\$ 457	\$519,277

The Company applied a practical expedient to aggregate the effect of all contract modifications that occurred before the adoption date.

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See Note 7 “Revenues” in the condensed consolidated interim financial statements for additional information regarding revenues.

Restricted cash and restricted cash equivalents — Effective January 1, 2018, the Company adopted Accounting Standard Update (“ASU”) No. 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash which requires the Company to include in its cash and cash equivalents balances presented in the statements of cash flows amounts that are deemed to be restricted in nature. As a result of the adoption, the Company restated its condensed consolidated statements of cash flows for all of the prior periods presented. The impact of adoption on the Company’s condensed consolidated statement of cash flows was as follows for the nine months ended September 30, 2017:

	As Originally Reported	Restated	Effect
Cash flows from operating activities:			
Changes in operating assets and liabilities:			
Prepaid expenses and other assets	\$4,436	\$2,036	\$(2,400)
Net cash provided by operating activities	\$123,980	\$121,580	\$(2,400)
Cash flows from investing activities:			
Decrease in restricted cash and time deposits, net	\$(268)	\$(408)	\$(140)
Acquisition of businesses, net of cash acquired	\$(6,840)	\$(6,810)	\$30
Net cash used in investing activities	\$(24,014)	\$(24,124)	\$(110)
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	\$10,286	\$10,435	\$149
Net increase in cash, cash equivalents and restricted cash	\$150,468	\$148,107	\$(2,361)
Cash, cash equivalents and restricted cash, beginning of period	362,025	364,664	2,639
Cash, cash equivalents and restricted cash, end of period	\$512,493	\$512,771	\$278

Derivatives and Hedging — Effective April 1, 2018, the Company early-adopted ASU 2017-12, Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities. The new guidance is intended to simplify and amend hedge accounting and reporting to better align and disclose the economic results of an entity’s risk management activities in its financial statements. The ASU makes more financial and non-financial hedging strategies eligible for hedge accounting. It also changes how companies assess hedge effectiveness and amends the presentation and disclosure requirements by eliminating the requirement to separately measure and report hedge ineffectiveness and generally requires companies, for qualifying hedges, to present the entire change in the fair value of a hedging instrument in the same income statement line as the hedged item. The guidance also eases documentation and assessment requirements and modifies the accounting for components excluded from the assessment of hedge effectiveness. The guidance requires entities to apply the amended presentation and disclosure guidance prospectively as of the period of adoption. The adoption of this guidance did not have any effect on the consolidated financial results.

The Company enters into derivative financial instruments to manage exposure to fluctuations in certain foreign currencies. During 2018, for accounting purposes, these foreign currency forward contracts became designated as hedges, as defined under FASB ASC Topic 815, Derivatives and Hedging. The Company measures these foreign currency derivative contracts at fair value on a recurring basis utilizing Level 2 inputs. The Company records changes in the fair value of these hedges in accumulated other comprehensive income/(loss) in our consolidated balance sheet until the forecasted transaction occurs. When the forecasted transaction occurs, the related gain or loss on the cash flow hedge is reclassified to the same line item in the statement of income as the forecasted transaction is recorded. In the event the underlying forecasted transaction does not occur, or it becomes probable that it will not occur, the Company reclassifies the gain or loss on the underlying hedge from accumulated other comprehensive income/(loss) into income. The cash flow impact of derivatives identified as hedging instruments is reflected as cash flows from operating activities. The cash flow impact of derivatives not identified as hedging instruments is reflected as cash flows from investing activities.

Pending Accounting Standards

From time to time, new accounting pronouncements are issued by the FASB or other standards-setting bodies that the Company will adopt according to the various timetables the FASB specifies. Unless otherwise discussed below, the Company believes the impact of recently issued standards that are not yet effective will not have a material impact on its consolidated financial position, results of operations and cash flows upon adoption.

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Leases — Effective January 1, 2019, the Company will be required to adopt the new guidance of ASC Topic 842, Leases (Topic 842) (with early adoption permitted effective January 1, 2018). This amendment supersedes previous accounting guidance (Topic 840) and requires all leases, with the exception of leases with a term of twelve months or less, to be recorded on the balance sheet as lease assets and lease liabilities. The standard allows for two methods of adoption to recognize and measure leases: retrospectively to each prior period presented in the financial statements with the cumulative effect of initially applying the guidance recognized at the beginning of the earliest comparative period presented or retrospectively at the beginning of the period of adoption with the cumulative effect of initially applying the guidance recognized at the beginning of the period in which the guidance is first applied. Both adoption methods include a number of optional practical expedients that entities may elect to apply. These practical expedients relate to the identification and classification of leases that commenced before the effective date, initial direct costs for leases that commenced before the effective date, and the ability to use hindsight in evaluating lessee options to extend or terminate a lease or to purchase the underlying asset. An entity that elects to apply the practical expedients will, in effect, continue to account for leases that commence before the effective date in accordance with previous GAAP unless the lease is modified, except that lessees are required to recognize a right-of-use asset and a lease liability for all operating leases based on the present value of the remaining minimum rental payments that were tracked and disclosed under previous GAAP. The transition guidance in Topic 842 also provides specific guidance for the amounts previously recognized in accordance with the business combinations guidance for leases. The Company has developed a transition plan, which includes making necessary changes to policies, processes, internal controls and system enhancements to generate the information necessary to comply with the new standard. The Company has identified a global lease management and accounting software solution, which is currently being tested and implemented. The Company has collected relevant data and is finalizing its evaluation of lease arrangements, potential embedded leases and accounting policy elections. While the Company is currently assessing the quantitative impact, the Company expects the new guidance will have a material impact on its consolidated balance sheet due to the addition of right-of-use assets and lease liabilities principally related to its office space leases. EPAM does not expect the new guidance to have a material impact on its consolidated statement of income and comprehensive income or its consolidated statement of cash flows. The Company expects to adopt this standard on January 1, 2019 using the method of adoption whereby the cumulative effect of adoption is recognized at the beginning of the period of adoption.

Measurement of Credit Losses on Financial Instruments — Effective January 1, 2020, the Company will be required to adopt the amended guidance of ASC Topic 326, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, (with early adoption permitted effective January 1, 2019.) The amendments in this update change how companies measure and recognize credit impairment for many financial assets. The new expected credit loss model will require companies to immediately recognize an estimate of credit losses expected to occur over the remaining life of the financial assets (including trade receivables) that are in the scope of the update. The update also made amendments to the current impairment model for held-to-maturity and available-for-sale debt securities and certain guarantees. Entities are required to adopt the standard using a modified-retrospective approach through a cumulative effect adjustment to retained earnings as of the beginning of the period of adoption. The Company has not yet completed its assessment of the impact of the new guidance on its consolidated financial statements or concluded on when it will adopt the standard.

2. ACQUISITIONS

Continuum — On March 15, 2018, the Company acquired all of the outstanding equity of Continuum Innovation LLC together with its subsidiaries (“Continuum”) to enhance the Company’s consulting capabilities as well as its digital and service design practices. Continuum, headquartered in Boston with offices located in Milan, Seoul, and Shanghai, focuses on four practices including strategy, physical and digital design, technology and its Made Real Lab. The acquisition of Continuum added approximately 125 design consultants to the Company’s headcount.

In connection with the Continuum acquisition, the Company paid \$52,515 as cash consideration, of which \$5,410 was placed in escrow for a period of 9 to 15 months as security for the indemnification obligations of the sellers under the terms of the equity purchase agreement. Furthermore, subject to attainment of specified performance targets in the 12 months after the acquisition, the Company will make a cash earnout payment with a maximum amount payable of

\$3,135. The Company recorded \$2,400 related to this earnout payment as contingent consideration as of the acquisition date. During the three months ended September 30, 2018, the Company recorded a \$900 reduction to the fair value of the contingent consideration (Note 4 “Fair Value Measurements”).

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The following table summarizes the preliminary fair values of the assets acquired and liabilities assumed in connection with the acquisition of Continuum as originally reported and as adjusted as of September 30, 2018:

	As Originally Reported	As Adjusted
Cash and cash equivalents	\$ 2,251	\$ 2,251
Accounts receivable	6,676	6,676
Unbilled revenues	2,463	2,463
Prepaid and other current assets	942	942
Goodwill	29,805	26,693
Intangible assets	16,600	14,450
Property and equipment and other noncurrent assets	8,902	8,902
Total assets acquired	\$ 67,639	\$ 62,377
Accounts payable, accrued expenses and other current liabilities	\$ 2,991	\$ 2,751
Due to employees	1,001	1,001
Long-term debt (Note 6)	3,220	3,220
Other noncurrent liabilities	5,412	490
Total liabilities assumed	\$ 12,624	\$ 7,462
Net assets acquired	\$ 55,015	\$ 54,915

During the three months ended September 30, 2018, the Company updated the valuation of the acquired intangible asset related to a favorable lease decreasing its value by \$400. This adjustment resulted in a corresponding increase in the value of acquired goodwill. The effect of the adjustment recorded during the three months ended September 30, 2018 that would have been recognized in a prior period if the adjustment to the preliminary amounts had been recognized as of the acquisition date was not material. The Company expects to complete the purchase price allocation as soon as practicable but no later than one year from the acquisition date.

The following table presents the estimated fair values and useful lives of intangible assets acquired in connection with the acquisition of Continuum:

	Continuum Weighted Average Useful Life (in years)	Amount
Customer relationships	6.5	\$5,800
Favorable lease	11.2	5,500
Contract royalties	8	1,900
Trade names	5	1,250
Total		\$14,450

The goodwill recognized as a result of the Continuum acquisition is attributable primarily to strategic and synergistic opportunities related to the consulting business, the assembled workforce of Continuum and other factors. The goodwill is expected to be deductible for income tax purposes.

Revenues generated by Continuum totaled \$8,472 and \$18,696 during the three and nine months ended September 30, 2018. Pro forma results of operations have not been presented because the effect of the Continuum acquisition on the Company's condensed consolidated financial statements was not material.

Table of Contents**3. GOODWILL**

Goodwill by reportable segment was as follows:

	North America	Europe	Total
Balance as of December 31, 2017	\$77,290	\$42,241	\$119,531
Continuum acquisition (Note 2)	26,693	—	26,693
Effect of net foreign currency exchange rate changes	(193)	(1,044)	(1,237)
Balance as of September 30, 2018	\$103,790	\$41,197	\$144,987

There were no accumulated impairment losses in the North America or Europe reportable segments as of September 30, 2018 or December 31, 2017.

4. FAIR VALUE MEASUREMENTS

The Company carries certain assets and liabilities at fair value on a recurring basis on its consolidated balance sheets. The following table shows the fair values of the Company's financial assets and liabilities measured at fair value on a recurring basis as of September 30, 2018:

	As of September 30, 2018			
	Balance	Level 1	Level 2	Level 3
Foreign exchange derivative assets	\$114	\$	—\$114	\$—
Total assets measured at fair value on a recurring basis	\$114	\$	—\$114	\$—
Contingent consideration	\$1,500	\$	—\$—	\$1,500
Foreign exchange derivative liabilities	2,806	—	2,806	—
Total liabilities measured at fair value on a recurring basis	\$4,306	\$	—\$2,806	\$1,500

The Company had no material financial assets or liabilities measured at fair value on a recurring basis as of December 31, 2017.

Our Level 2 foreign exchange derivatives are valued using pricing models and discounted cash flow methodologies based on observable foreign exchange data at the measurement date. See Note 5 "Derivative Financial Instruments" for further information regarding the Company's derivative financial instruments.

As of September 30, 2018, contingent consideration included amounts payable in cash in connection with the acquisition of Continuum (Note 2 "Acquisitions"). The fair value of the contingent consideration is based on the expected future payments to be made to the sellers of the acquired business in accordance with the provisions outlined in the purchase agreement. In determining fair value, the Company considered a variety of factors, including future performance of the acquired businesses using financial projections developed by the Company and market risk assumptions that were derived for revenue growth and earnings before interest and taxes. The Company estimated future payments using the earnout formula and performance targets specified in the purchase agreement and adjusted those estimates to reflect the probability of their achievement. Those future payments were then discounted to present value using a rate based on the weighted-average cost of capital of guideline companies. The Company believes its estimates and assumptions are reasonable; however, there is significant judgment involved. Changes in financial projections, market risk assumptions, discount rates or probability assumptions related to achieving the various earnout criteria would result in a change in the fair value of the recorded contingent liability. Such changes, if any, are recorded within Interest and other income, net in the Company's consolidated statement of income and comprehensive income.

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A reconciliation of the beginning and ending balances of acquisition-related contractual contingent liabilities using significant unobservable inputs (Level 3) for the nine months ended September 30, 2018 is as follows:

	Amount
Contractual contingent liabilities at December 31, 2017	\$—
Acquisition date fair value of contractual contingent liabilities — Continuum (Note 2)	2,400
Changes in fair value of contractual contingent liabilities included in Interest and other income, net	(900)
Contractual contingent liabilities at September 30, 2018	\$1,500

Estimates of fair value of financial instruments not carried at fair value on a recurring basis on the Company's consolidated balance sheets are generally subjective in nature, and are determined as of a specific point in time based on the characteristics of the financial instruments and relevant market information. The Company uses the following methods to estimate the fair values of its financial instruments:

for financial instruments that have quoted market prices, those quoted prices are used to estimate fair value;
for financial instruments for which no quoted market prices are available, fair value is estimated using information obtained from independent third parties, or by discounting the expected cash flows using an estimated current market interest rate for the financial instrument;
for financial instruments for which no quoted market prices are available and that have no defined maturity, have a remaining maturity of 360 days or less, or reprice frequently to a market rate, the Company assumes that the fair value of these instruments approximates their reported value, after taking into consideration any applicable credit risk.
The generally short duration of certain of the Company's assets and liabilities results in a number of assets and liabilities for which fair value equals or closely approximates the amount recorded on the Company's condensed consolidated balance sheets. These types of assets and liabilities which are reported on the Company's condensed consolidated balance sheets include:

cash and cash equivalents;
time deposits and restricted cash;
employee loans;
borrowings under the Company's 2017 Credit Facility (Note 6 "Long-Term Debt").

The fair value of employee housing loans is estimated using information on the rates of return that market participants in Belarus would require when investing in unsecured U.S. dollar-denominated government bonds with similar maturities (a "risk-free rate"), after taking into consideration any applicable credit and liquidity risk.

The following tables present the reported amounts and estimated fair values of the financial assets and liabilities for which disclosure of fair value is required, as they would be categorized within the fair value hierarchy, as of the dates indicated:

	Balance	Estimated Fair Value	Fair Value Hierarchy		
			Level 1	Level 2	Level 3
September 30, 2018					
Financial Assets:					
Cash and cash equivalents	\$685,108	\$685,108	\$685,108	\$—	\$—
Restricted cash	\$1,193	\$1,193	\$1,193	\$—	\$—
Employee loans	\$3,745	\$3,745	\$—	\$—	\$3,745
Financial Liabilities:					
Borrowings under the 2017 Credit Facility	\$25,016	\$25,016	\$—	\$25,016	\$—

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	Balance	Fair Value Hierarchy			
		Estimated Fair Value	Level 1	Level 2	Level 3
December 31, 2017					
Financial Assets:					
Cash and cash equivalents	\$582,585	\$582,585	\$582,585	\$—	\$—
Time deposits and restricted cash	\$673	\$673	\$—	\$673	\$—
Employee loans	\$4,210	\$4,210	\$—	\$—	\$4,210
Financial Liabilities:					
Borrowings under the 2017 Credit Facility	\$25,009	\$25,009	\$—	\$25,009	\$—

5. DERIVATIVE FINANCIAL INSTRUMENTS

The Company conducts a large portion of its operations in international markets that subject it to foreign currency fluctuations. To manage the risk of fluctuations in foreign currency exchange rates, during the nine months ended September 30, 2018, the Company implemented a hedging program whereby it entered into a series of foreign exchange forward contracts with durations of twelve months or less that are designated as cash flow hedges of forecasted Russian ruble, Polish zloty and Indian rupee transactions.

The Company measures derivative instruments and hedging activities at fair value and recognizes them as either assets or liabilities in its consolidated balance sheets. Accounting for the gains and losses resulting from changes in fair value depends on the use of the derivative and whether it is designated and qualifies for hedge accounting. As of September 30, 2018, all of the Company's foreign exchange forward contracts were designated as hedges. To receive hedge accounting treatment, all hedging relationships are formally documented at the inception of the hedge, and the hedges must be highly effective in offsetting changes to future cash flows on hedged transactions.

Derivatives may give rise to credit risks from the possible non-performance by counterparties. The Company has limited its credit risk by entering into derivative transactions only with highly-rated financial institutions and by conducting an ongoing evaluation of the creditworthiness of the financial institutions with which the Company does business. There is no financial collateral (including cash collateral) required to be posted by the Company related to the foreign exchange forward contracts.

The fair value of derivative instruments on the Company's consolidated balance sheets as of September 30, 2018 and December 31, 2017 were as follows:

	Balance Sheet Classification	As of September 30, 2018	As of December 31, 2017
		Asset Derivatives	Liability Derivatives
Foreign exchange forward contracts - Designated as hedging instruments	Prepaid and other current assets	\$114	\$ —
	Accrued expenses and other current liabilities	\$ 2,806	\$ —
Foreign exchange forward contracts - Not designated as hedging instruments	Prepaid and other current assets	\$—	\$ 114

The Company records changes in the fair value of its cash flow hedges in accumulated other comprehensive income/(loss) in the consolidated balance sheet until the forecasted transaction occurs. When the forecasted transaction occurs, the Company reclassifies the related gain or loss on the cash flow hedge to cost of revenues (exclusive of depreciation and amortization). In the event the underlying forecasted transaction does not occur, or it

becomes probable that it will not occur, the Company reclassifies the gain or loss on the related cash flow hedge into income. If the Company does not elect hedge accounting, or the contract does not qualify for hedge accounting treatment, the changes in fair value from period to period are recorded in income.

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The changes in the fair value of foreign currency derivative instruments in our unaudited condensed consolidated statements of income and comprehensive income for the three and nine months ended September 30, 2018 and 2017 were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Foreign exchange forward contracts - Designated as hedging instruments:				
Change in fair value recognized in accumulated other comprehensive loss	(86)	—	(2,692)	—
Net loss reclassified from accumulated other comprehensive loss into cost of revenues (exclusive of depreciation and amortization)	(1,604)	—	(2,541)	—
Foreign exchange forward contracts - Not designated as hedging instruments:				
Net gain recognized in foreign exchange (loss)/gain	—	111	44	270

6. LONG-TERM DEBT

Revolving Line of Credit — On May 24, 2017, the Company entered into an unsecured credit facility (the “2017 Credit Facility”) with PNC Bank, National Association; PNC Capital Markets LLC; Wells Fargo Bank, National Association; Santander Bank, N.A.; Fifth Third Bank and Citibank N.A. (collectively the “Lenders”). The 2017 Credit Facility provides for a borrowing capacity of \$300,000, with potential to increase the credit facility up to \$400,000 if certain conditions are met. The 2017 Credit Facility matures on May 24, 2022.

Borrowings under the 2017 Credit Facility may be denominated in U.S. dollars or up to a maximum of \$100,000 equivalent in British pounds sterling, Canadian dollars, euros or Swiss francs or other currencies as may be approved by the administrative agent and the Lenders. Borrowings under the 2017 Credit Facility bear interest at either a base rate or Euro-rate plus a margin based on the Company’s leverage ratio. The base rate is equal to the highest of (a) the Overnight Bank Funding Rate, plus 0.5%, (b) the Prime Rate, and (c) the Daily LIBOR Rate, plus 1.0%. As of September 30, 2018, the Company’s outstanding borrowings are subject to a LIBOR-based interest rate which resets regularly at issuance, based on lending terms.

The 2017 Credit Facility includes customary business and financial covenants that may restrict the Company’s ability to make or pay dividends (other than certain intercompany dividends) if a potential or an actual event of default has occurred or would be triggered. As of September 30, 2018, the Company was in compliance with all covenants contained in the 2017 Credit Facility.

The following table presents the outstanding debt and borrowing capacity of the Company under the 2017 Credit Facility:

	As of September 30, 2018	As of December 31, 2017
Outstanding debt	\$25,000	\$25,000
Interest rate	3.2 %	2.6 %
Irrevocable standby letters of credit	\$387	\$1,294
Available borrowing capacity	\$274,613	\$273,706
Current maximum borrowing capacity	\$300,000	\$300,000

As part of the acquisition of Continuum, the Company assumed \$3,448 of long-term debt associated with a leased facility and payable to Continuum’s landlord. The debt was payable in monthly installments through March 2029 and bore interest at a rate of 8% per annum. In March 2018, the Company paid \$3,448 to settle this assumed long-term debt.

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Adoption of ASC Topic 606, “Revenue from Contracts with Customers” and Change in Accounting Policies Effective January 1, 2018, the Company adopted ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606) as amended. The Company adopted the new guidance using the modified retrospective method by recognizing the cumulative effect of adoption as an adjustment to retained earnings as of January 1, 2018. Results for reporting periods beginning after January 1, 2018 are presented under Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with Topic 605. The impact of adoption of the new guidance on the Company’s consolidated financial statements as of January 1, 2018 are presented in Note 1 “Summary of Significant Accounting Policies.”

The Company recognizes revenues when control of goods or services is passed to a customer in an amount that reflects the consideration the Company expects to be entitled to in exchange for those goods or services. Such control may be transferred over time or at a point in time depending on satisfaction of obligations stipulated by the contract. Consideration expected to be received may consist of both fixed and variable components and is allocated to each separately identifiable performance obligation based on the performance obligation’s relative standalone selling price. Variable consideration usually takes the form of volume-based discounts, service level credits, price concessions or incentives. Determining the estimated amount of such variable consideration involves assumptions and judgment that can have an impact on the amount of revenues reported.

The Company derives its revenues from a variety of service offerings, which represent specific competencies of its IT professionals. Fees for these contracts may be in the form of time-and-materials or fixed-price arrangements. The majority of the Company’s revenues are generated under time-and-material contracts which are billed using hourly, daily or monthly rates to determine the amounts to be charged directly to the client. The Company applies a practical expedient and revenues related to time-and-material contracts are recognized based on the Company’s right to invoice for services performed.

Fixed-price contracts include maintenance and support arrangements, which may exceed one year in duration, as well as application development arrangements. Maintenance and support arrangements generally relate to the provision of ongoing services. Revenues for such agreements are recognized ratably over the expected service period. Application development arrangements are accounted for using input or output methods for measuring the progress towards satisfaction of the performance obligation. Input methods are used only when there is a direct correlation between hours incurred and the end product delivered. Assumptions, risks and uncertainties inherent in the estimates used to measure progress could affect the amount of revenues, receivables and deferred revenues at each reporting period. Revenues from licenses which have significant stand-alone functionality are recognized at a point in time when control of the license is transferred to the customer. Revenues from licenses which do not have stand-alone functionality are recognized over time.

If there is an uncertainty about the receipt of payment for the services, revenue is deferred until the uncertainty is sufficiently resolved. The Company applies a practical expedient and does not assess the existence of a significant financing component if the period between when the Company transfers the service to a customer and when the customer pays for that service is one year or less.

The Company reports gross reimbursable “out-of-pocket” expenses incurred as both revenues and cost of revenues in the condensed consolidated statements of income and comprehensive income.

The following tables summarize the impacts of changes in accounting policies after adoption of Topic 606 on the Company’s condensed consolidated financial statements for the three and nine months ended September 30, 2018, which primarily resulted from deferring the timing of revenue recognition for contracts that were previously recognized on a cash basis and recognizing revenues from certain license agreements at a point-in-time rather than over time:

As of September 30, 2018		
As Reported	Balances Without Adoption of Topic	Effect of Change Higher/(Lower)

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Balance Sheet

Liabilities

Accrued expenses and other current liabilities	\$98,442	\$98,354	\$ 88	
Other noncurrent liabilities	11,804	11,823	(19)
Stockholders' equity				
Retained earnings	\$699,568	\$699,637	\$ (69)

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	Three Months Ended September 30, 2018			Nine Months Ended September 30, 2018		
	As Reported	Balances Without Adoption of Topic 606	Effect of Change	As Reported	Balances Without Adoption of Topic 606	Effect of Change
Income Statement						
Revenues	\$468,186	\$468,257	\$ (71)	\$1,337,981	\$1,338,069	\$ (88)
Income from operations	\$64,560	\$64,631	\$ (71)	\$167,494	\$167,582	\$ (88)
Provision for/(benefit from) income taxes	\$369	\$385	\$ (16)	\$(9,286)	\$(9,267)	\$ (19)
Net income	\$65,618	\$65,673	\$ (55)	\$180,291	\$180,360	\$ (69)

Disaggregation of Revenues

The following tables show the disaggregation of the Company's revenues by major client location, including a reconciliation of the disaggregated revenues with the reportable segments (Note 12 "Segment Information") for the three and nine months ended September 30, 2018:

Three Months Ended September 30, 2018

Reportable Segments	North America	Europe	Russia	Total Segment Revenues	Other Income Included in Segment Revenues	Consolidated Revenues
Client Locations						
North America	\$271,551	\$12,536	\$17	\$284,104	\$ (27)	\$284,077
Europe	5,408	146,990	3	152,401	(166)	152,235
CIS	2,208	142	16,184	18,534	—	18,534
APAC	1,671	11,814	4	13,489	(149)	13,340
Revenues	\$280,838	\$171,482	\$16,208	\$468,528	\$ (342)	\$468,186

Nine Months Ended September 30, 2018

Reportable Segments	North America	Europe	Russia	Total Segment Revenues	Other Income Included in Segment Revenues	Consolidated Revenues
Client Locations						
North America	\$747,894	\$40,074	\$46	\$788,014	\$ (40)	\$787,974
Europe	11,234	444,468	45	455,747	(623)	455,124
CIS	6,300	233	53,192	59,725	—	59,725
APAC	3,709	31,545	91	35,345	(187)	35,158
Revenues	\$769,137	\$516,320	\$53,374	\$1,338,831	\$ (850)	\$1,337,981

The following tables show the disaggregation of the Company's revenues by industry vertical, including a reconciliation of the disaggregated revenues with the reportable segments (Note 12 "Segment Information") for the three and nine months ended September 30, 2018:

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Three Months Ended September 30, 2018

Reportable Segments	North America	Europe	Russia	Total Segment Revenues	Other Income Included in Segment Revenues	Consolidated Revenues
Industry Verticals						
Financial Services	\$30,488	\$61,713	\$12,786	\$104,987	\$ (189)	\$ 104,798
Travel & Consumer	45,690	53,634	1,891	101,215	(122)	101,093
Software & Hi-Tech	68,572	19,035	569	88,176	—	88,176
Business Information & Media	64,152	17,650	—	81,802	—	81,802
Life Sciences & Healthcare	39,550	5,078	12	44,640	(31)	44,609
Emerging Verticals	32,386	14,372	950	47,708	—	47,708
Revenues	\$280,838	\$171,482	\$16,208	\$468,528	\$ (342)	\$ 468,186

Nine Months Ended September 30, 2018

Reportable Segments	North America	Europe	Russia	Total Segment Revenues	Other Income Included in Segment Revenues	Consolidated Revenues
Industry Verticals						
Financial Services	\$79,176	\$190,027	\$43,102	\$312,305	\$ (697)	\$ 311,608
Travel & Consumer	133,481	155,208	5,356	294,045	(122)	293,923
Software & Hi-Tech	193,672	59,186	1,957	254,815	—	254,815
Business Information & Media	181,021	54,637	—	235,658	—	235,658
Life Sciences & Healthcare	99,893	15,550	12	115,455	(31)	115,424
Emerging Verticals	81,894	41,712	2,947	126,553	—	126,553
Revenues	\$769,137	\$516,320	\$53,374	\$1,338,831	\$ (850)	\$ 1,337,981

The following tables show the disaggregation of the Company's revenues by contract type including a reconciliation of the disaggregated revenues with the Company's reportable segments (Note 12 "Segment Information") for the three and nine months ended September 30, 2018:

Three Months Ended September 30, 2018

Reportable Segments	North America	Europe	Russia	Total Segment Revenues	Other Income Included in Segment Revenues	Consolidated Revenues
Contract Types						
Time-and-material	\$256,549	\$155,797	\$9,441	\$421,787	\$ —	\$ 421,787
Fixed-price	23,241	15,001	6,759	45,001	—	45,001
Licensing	798	173	1	972	—	972
Other revenues	250	511	7	768	(342)	426
Revenues	\$280,838	\$171,482	\$16,208	\$468,528	\$ (342)	\$ 468,186

Nine Months Ended September 30, 2018

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Reportable Segments	North America	Europe	Russia	Total Segment Revenues	Other Income Included in Segment Revenues	Consolidated Revenues
Contract Types						
Time-and-material	\$704,612	\$471,900	\$29,302	\$1,205,814	\$ —	\$ 1,205,814
Fixed-price	61,716	42,035	24,038	127,789	—	127,789
Licensing	2,098	1,119	12	3,229	—	3,229
Other revenues	711	1,266	22	1,999	(850)	1,149
Revenues	\$769,137	\$516,320	\$53,374	\$1,338,831	\$ (850)	\$ 1,337,981

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Timing of Revenue Recognition

The following tables show the timing of revenue recognition:

Three Months Ended September 30, 2018

Reportable Segments	North America	Europe	Russia	Total Segment Revenues	Other Income Included in Segment Revenues	Consolidated Revenues
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Timing of Revenue Recognition

Transferred at a point of time	\$ 194	\$ 289	\$ —	\$ 483	\$ (342)	\$ 141
Transferred over time	280,644	171,193	16,208	468,045	—	468,045
Revenues	\$280,838	\$171,482	\$16,208	\$468,528	\$ (342)	\$ 468,186

Nine Months Ended September 30, 2018

Reportable Segments	North America	Europe	Russia	Total Segment Revenues	Other Income Included in Segment Revenues	Consolidated Revenues
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Timing of Revenue Recognition

Transferred at a point of time	\$ 832	\$ 1,351	\$ 10	\$ 2,193	\$ (850)	\$ 1,343
Transferred over time	768,305	514,969	53,364	1,336,638	—	1,336,638
Revenues	\$769,137	\$516,320	\$53,374	\$1,338,831	\$ (850)	\$ 1,337,981

During the three and nine months ended September 30, 2018, the Company recognized \$3,610 and \$6,627 of revenues, respectively, from performance obligations satisfied in previous periods.

The following table includes the estimated revenues expected to be recognized in the future related to performance obligations that are partially or fully unsatisfied as of September 30, 2018. The Company applies a practical expedient and does not disclose the value of unsatisfied performance obligations for contracts that (i) have an original expected duration of one year or less and (ii) contracts for which it recognizes revenues at the amount to which it has the right to invoice for services provided:

	Less than 1 year	1 Year	2 Years	3 Years	Total
Contract Type					
Fixed-price	\$4,590	\$568	\$126	\$ —	\$5,284

The Company applies a practical expedient and does not disclose the amount of the transaction price allocated to the remaining performance obligations nor provide an explanation of when the Company expects to recognize that amount as revenue for certain variable consideration.

Contract Balances

The following table provides information on the classification of contract assets and liabilities in the condensed consolidated balance sheets:

	As of September 30, 2018	As of December 31, 2017
Contract assets included in unbilled revenues	\$ 19,180	\$ 7,901
Contract liabilities included in accrued expenses and other current liabilities	\$ 3,376	\$ 4,498

Contract assets included in unbilled revenues are recorded when services have been provided but the Company does not have an unconditional right to receive consideration. The Company recognizes an impairment loss when the contract carrying amount is greater than the remaining consideration receivable, less directly related costs to be incurred. Contract assets have increased from December 31, 2017 primarily due to new contracts entered into in 2018 where the Company's right to bill is contingent upon achievement of contractual milestones.

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Contract liabilities comprise amounts collected from the Company's clients for revenues not yet earned. Such amounts are anticipated to be recorded as revenues when services are performed in subsequent periods. During the three and nine months ended September 30, 2018, the Company recognized \$258 and \$3,690 of revenues, respectively, that were included in Accrued expenses and other current liabilities at January 1, 2018.

8. INCOME TAXES

In determining its interim provision for/(benefit from) income taxes, the Company uses an estimated annual effective tax rate, which is based on expected annual profit before tax, statutory tax rates and tax planning opportunities available in the various jurisdictions in which the Company operates. Certain significant or unusual items are separately recognized in the quarter in which they occur and can be a source of variability in the effective tax rates from quarter to quarter.

The Company's worldwide effective tax rate for the three months ended September 30, 2018 and 2017 was 0.6% and 15.7%, respectively, and (5.4)% and 15.2% during the nine months ended September 30, 2018 and 2017, respectively. The interim provision for/(benefit from) income taxes in the three months ended September 30, 2018 was unfavorably impacted by the recognition of \$252 of net deferred tax liabilities and the interim provision for/(benefit from) income taxes in the nine months ended September 30, 2018 was favorably impacted by the recognition of \$25,088 of net deferred tax assets as a result of the election to disregard as separate entities for U.S. tax purposes certain foreign subsidiaries of the Company. In addition, the Company recorded excess tax benefits upon vesting or exercise of stock-based awards of \$6,067 and \$2,620 during the three months ended September 30, 2018 and 2017, respectively, and \$16,197 and \$8,452 during the nine months ended September 30, 2018 and 2017, respectively.

Due to the timing of the enactment and the complexity involved in applying the provisions of the Tax Cuts and Jobs Act ("U.S. Tax Act"), the Company made reasonable estimates of the effects and recorded provisional amounts in its financial statements as of December 31, 2017. As the Company collects and prepares necessary data and interprets the U.S. Tax Act and any additional guidance issued by the U.S. Treasury Department, the IRS, and other standard-setting bodies, and further refines the calculations, the Company may make adjustments to the provisional amounts recorded. During the three and nine months ended September 30, 2018, the Company further refined its estimate and recorded net provisional reductions of \$7,053 and \$4,896, respectively, associated with the provisional charge for the one-time transition tax on accumulated foreign subsidiary earnings not previously subject to U.S. income tax which now totals \$59,425. The provisional reductions were primarily driven by a decrease in repatriation taxes as a result of the Company completing its analysis of the earnings of relevant foreign subsidiaries in the third quarter of 2018. Of this amount, \$49,117 is classified as Taxes payable, noncurrent as of September 30, 2018. The Company continues to analyze the impact of certain foreign tax credits, continues to assess the application of certain state income tax laws and expects to complete its analysis during the fourth quarter of 2018. Any adjustments during this measurement period will be included in the provision for income taxes in the reporting period when such adjustments are determined.

The U.S. Tax Act subjects a U.S. shareholder to tax on global intangible low-taxed income ("GILTI") earned by certain foreign subsidiaries. The FASB Staff Q&A, Topic 740, No. 5, Accounting for Global Intangible Low-Taxed Income, states that an entity can make an accounting policy election to either recognize deferred taxes for temporary basis differences expected to reverse as GILTI in future years or provide for the tax expense related to GILTI in the year the tax is incurred. During the nine months ended September 30, 2018, the Company elected to provide for the tax expense related to GILTI in the year the tax is incurred. This election did not have a material impact on the interim financial statements for the three and nine months ended September 30, 2018.

9. STOCK-BASED COMPENSATION

The following table summarizes the components of stock-based compensation expense recognized in the Company's condensed consolidated statements of income and comprehensive income for the periods indicated:

Three Months Ended September 30,	Nine Months Ended September 30,
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	2018	2017	2018	2017
Cost of revenues (exclusive of depreciation and amortization)	\$7,492	\$4,913	\$22,835	\$14,452
Selling, general and administrative expenses	7,838	6,304	23,901	25,468
Total	\$15,330	\$11,217	\$46,736	\$39,920

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Stock Options

Stock option activity under the Company's plans is set forth below:

	Number of Options	Weighted Average Exercise Price	Aggregate Intrinsic Value	Weighted Average Remaining Contractual Term (in years)
Options outstanding at January 1, 2018	4,901,748	\$40.91		
Options granted	157,133	\$112.91		
Options exercised	(863,365)	\$36.90		
Options forfeited/cancelled	(30,819)	\$63.39		
Options expired	(250)	\$61.38		
Options outstanding at September 30, 2018	4,164,447	\$44.29	\$388,977	5.7

Options vested and exercisable at September 30, 2018	3,251,127	\$35.94	\$330,834	5.2
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Options expected to vest at September 30, 2018	870,538	\$73.59	\$55,810	7.5
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As of September 30, 2018, \$16,124 of total remaining unrecognized stock-based compensation cost related to unvested stock options, net of estimated forfeitures, is expected to be recognized over the weighted-average remaining requisite service period of 2.0 years.

As of September 30, 2018, a total of 1,000 shares underlying options exercised through September 30, 2018, were in transit with the Company's transfer agent.

Effective January 1, 2018, the Company changed the methodology for estimating volatility used in the Black-Scholes option valuation model. Prior to January 1, 2018, the Company estimated the volatility of its common stock by using the historical volatility of peer public companies including the Company's historical volatility. In the first quarter of 2018, the Company began exclusively using its own historical volatility as it believes this is a more accurate estimate of future volatility of the price of the Company's common stock. The Company did not change the methodology for estimating any other Black-Scholes option valuation model assumptions as disclosed in Note 13 "Stock-Based Compensation" to the audited consolidated financial statements included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2017.

Restricted Stock and Restricted Stock Units

Service-Based Awards

The table below summarizes activity related to the Company's equity-classified and liability-classified service-based awards for the nine months ended September 30, 2018.

	Equity-Classified Restricted Stock		Equity-Classified Equity-Settled Restricted Stock Units		Liability-Classified Cash-Settled Restricted Stock Units	
	Number of Shares	Weighted Average Grant Date Fair Value Per Share	Number of Shares	Weighted Average Grant Date Fair Value Per Share	Number of Shares	Weighted Average Grant Date Fair Value Per Share
Unvested service-based awards outstanding at January 1, 2018	1,840	\$54.37	688,012	\$71.60	314,829	\$72.50
Awards granted	—	\$—	332,683	\$114.35	85,380	\$112.65
Awards modified	—	\$—	(2,299)	\$72.80	2,299	\$116.63

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Awards vested	(1,047)	\$ 47.76	(215,263)	\$ 70.09	(91,052)	\$ 72.42
Awards forfeited/cancelled	—	\$ —	(39,644)	\$ 82.59	(6,998)	\$ 79.19
Unvested service-based awards outstanding at September 30, 2018	793	\$ 63.10	763,489	\$ 90.08	304,458	\$ 83.96

As of September 30, 2018, \$44 of total remaining unrecognized stock-based compensation cost related to service-based restricted stock is expected to be recognized over the weighted-average remaining requisite service period of 1.8 years.

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As of September 30, 2018, \$51,937 of total remaining unrecognized stock-based compensation cost related to service-based equity-classified restricted stock units (“RSUs”), net of estimated forfeitures, is expected to be recognized over the weighted-average remaining requisite service period of 2.7 years. As of September 30, 2018, there were 3,894 restricted share units vested for which the holders elected to defer delivery of EPAM Systems, Inc. ordinary shares. During the first quarter of 2018, 44,228 RSUs were granted in connection with the acquisition of Continuum.

As of September 30, 2018, \$29,486 of total remaining unrecognized stock-based compensation cost related to service-based liability-classified RSUs, net of estimated forfeitures, is expected to be recognized over the weighted-average remaining requisite service period of 2.5 years.

The liability associated with the service-based liability-classified RSUs as of September 30, 2018 and December 31, 2017, was \$9,174 and \$5,964, respectively, and was classified as Deferred compensation due to employees in the condensed consolidated balance sheets.

Performance-Based Awards

The table below summarizes activity related to the Company’s equity-classified performance-based awards for the nine months ended September 30, 2018.

	Equity-Classified Equity-Settled Restricted Stock Units	Weighted Average Grant Date Fair Value Per Share
Unvested performance-based awards outstanding at January 1, 2018	—	\$ —
Awards granted	45,375	\$ 121.75
Awards vested	—	\$ —
Awards forfeited/cancelled	—	\$ —
Unvested performance-based awards outstanding at September 30, 2018	45,375	\$ 121.75

As of September 30, 2018, \$4,514 of total remaining unrecognized stock-based compensation cost related to performance-based equity-classified restricted stock units is expected to be recognized over the weighted-average remaining requisite service period of 2.1 years.

Performance-based equity-classified RSUs were granted during the period in connection with the acquisition of Continuum and have a variable vesting period, subject to satisfaction of the applicable performance conditions with each vesting portion having its own service inception date. Compensation is recognized over the vesting period and adjusted for the probability of achievement of the performance criteria for each vesting portion separately. As of September 30, 2018, the Company reduced the expected likelihood of achieving the performance conditions underlying these unvested and outstanding performance-based equity-classified RSUs based on performance to date and expectations for future performance and therefore reduced the compensation cost recognized by \$183 associated with these RSUs. The Company will continue to reassess the probability of achievement of the performance criteria and adjust the amount of compensation expense accordingly.

10. EARNINGS PER SHARE

Basic earnings per share is computed by dividing income available to common shareholders by the weighted-average number of shares of common stock outstanding during the period. Diluted earnings per share is computed by dividing income available to common shareholders by the weighted-average number of shares of common stock outstanding

during the period increased to include the number of additional shares of common stock that would have been outstanding if the potentially dilutive securities had been issued. Potentially dilutive securities include outstanding stock options, unvested restricted stock and unvested equity-settled RSUs. The dilutive effect of potentially dilutive securities is reflected in diluted earnings per share by application of the treasury stock method.

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The following table sets forth the computation of basic and diluted earnings per share of common stock as follows:

	Three Months Ended September 30, 2018		Nine Months Ended September 30, 2018		2017	
Numerator for basic and diluted earnings per share:						
Net income	\$65,618	\$ 42,634	\$ 180,291	\$ 103,634		
Numerator for basic and diluted earnings per share	\$65,618	\$ 42,634	\$ 180,291	\$ 103,634		
Denominator:						
Weighted average common shares for basic earnings per share	53,851,865	52,545,155	53,485,339	51,806,700		
Net effect of dilutive stock options, restricted stock units and restricted stock awards	3,111,002	2,683,626	3,114,299	2,854,496		
Weighted average common shares for diluted earnings per share	56,962,867	55,228,781	56,599,638	54,661,196		
Net income per share:						
Basic	\$ 1.22	\$ 0.81	\$ 3.37	\$ 2.00		
Diluted	\$ 1.15	\$ 0.77	\$ 3.19	\$ 1.90		

The number of shares underlying equity-based awards that were excluded from the calculation of diluted earnings per share as their effect would be anti-dilutive was 157,316 and 121,896 during the three and nine months ended September 30, 2018, respectively. The number of shares underlying equity-based awards that were excluded from the calculation of diluted earnings per share as their effect would be anti-dilutive was 606,047 and 1,177,453 during the three and nine months ended September 30, 2017, respectively.

11. COMMITMENTS AND CONTINGENCIES

Indemnification Obligations — In the normal course of business, the Company is a party to a variety of agreements under which it may be obligated to indemnify the other party for certain matters. These obligations typically arise in contracts where the Company customarily agrees to hold the other party harmless against losses arising from a breach of representations or covenants for certain matters such as title to assets, intellectual property rights and data privacy matters associated with certain arrangements. The duration of these indemnifications varies, and in certain cases, is indefinite.

The Company is unable to reasonably estimate the maximum potential amount of future payments under these or similar agreements due to the unique facts and circumstances of each agreement and the fact that certain indemnifications provide for no limitation to the maximum potential future payments under the indemnification. Management is not aware of any such matters that would have a material effect on the condensed consolidated financial statements of the Company.

Litigation — From time to time, the Company is involved in litigation, claims or other contingencies arising in the ordinary course of business. The Company accrues a liability when a loss is considered probable and the amount can be reasonably estimated. When a material loss contingency is reasonably possible but not probable, the Company does not record a liability, but instead discloses the nature and the amount of the claim, and an estimate of the loss or range of loss, if such an estimate can be made. Legal fees are expensed as incurred. In the opinion of management, the outcome of any existing claims and legal or regulatory proceedings, if decided adversely, is not expected to have a material effect on the Company's business, financial condition, results of operations or cash flows.

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The Company determines its business segments and reports segment information in accordance with how the Company's chief operating decision maker ("CODM") organizes the segments to evaluate performance, allocate resources and make business decisions. Segment results are based on the segment's revenues and operating profit, where segment operating profit is defined as income from operations before unallocated costs. Generally, operating expenses for each reportable segment have similar characteristics and are subject to similar factors, pressures and challenges. Expenses included in segment operating profit consist principally of direct selling and delivery costs as well as an allocation of certain shared services expenses. Certain corporate expenses are not allocated to specific segments as these expenses are not controllable at the segment level. Such expenses include certain types of professional fees and recruitment and development expenses, non-corporate taxes, compensations to non-employee directors and certain other general and administrative expenses, including compensation of specific groups of non-production employees. In addition, the Company does not allocate amortization of acquisition-related intangible assets, goodwill and other assets impairment charges, stock-based compensation expenses, acquisition-related costs and certain other one-time charges. These unallocated amounts are combined with total segment operating profit to arrive at consolidated income from operations as reported below in the reconciliation of segment operating profit to consolidated income before provision for/(benefit from) income taxes.

The Company manages its business primarily based on the managerial responsibility for its client base. As managerial responsibility for a particular client relationship generally correlates with the client's geographic location, there is a high degree of similarity between client locations and the geographic boundaries of the Company's reportable segments. In some cases, managerial responsibility for a particular client is assigned to a management team in another region and is usually based on the strength of the relationship between client executives and particular members of EPAM's senior management team. In such cases, the client's activity would be reported through the management team's reportable segment.

Revenues from external customers and operating profit, before unallocated expenses, by reportable segments for the three and nine months ended September 30, 2018 and 2017, were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Segment revenues:				
North America	\$280,838	\$206,389	\$769,137	\$578,717
Europe	171,482	157,446	516,320	431,472
Russia	16,208	14,455	53,374	41,825
Total segment revenues	\$468,528	\$378,290	\$1,338,831	\$1,052,014
Segment operating profit:				
North America	\$60,763	\$45,529	\$155,944	\$126,243
Europe	28,871	25,984	84,329	66,453
Russia	543	1,685	8,211	7,129
Total segment operating profit	\$90,177	\$73,198	\$248,484	\$199,825

Intersegment transactions were excluded from the above on the basis that they are neither included in the measure of a segment's profit and loss results, nor considered by the CODM during the review of segment results.

There were no customers that accounted for more than 10% of total revenues during the three and nine months ended September 30, 2018 and 2017.

Accounts receivable and unbilled revenues are generally dispersed across the Company's clients in proportion to their revenues. There were no customers individually exceeding 10% of total unbilled revenues as of September 30, 2018. As of December 31, 2017, unbilled revenues from one customer, individually exceeded 10% and accounted for 13.0% of total unbilled revenues. There were no customers individually exceeding 10% of total accounts receivable as of September 30, 2018 and December 31, 2017.

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Reconciliation of segment revenues to consolidated revenues and segment operating profit to consolidated income before provision for/(benefit from) income taxes is presented below:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Total segment revenues	\$468,528	\$378,290	\$1,338,831	\$1,052,014
Other income included in segment revenues	(342)	(767)	(850)	(863)
Revenues	\$468,186	\$377,523	\$1,337,981	\$1,051,151
Total segment operating profit:	\$90,177	\$73,198	\$248,484	\$199,825
Unallocated amounts:				
Other income included in segment revenues	(342)	(767)	(850)	(863)
Stock-based compensation expense	(15,330)	(11,217)	(46,736)	(39,920)
Non-corporate taxes	(2,063)	(1,966)	(7,041)	(7,212)
Professional fees	(1,420)	(1,050)	(4,736)	(5,870)
Depreciation and amortization expense	(2,011)	(1,883)	(5,754)	(5,763)
Bank charges	(782)	(574)	(1,950)	(1,417)
One-time charges and other acquisition-related expenses	(155)	(289)	(2,016)	(1,187)
Other operating expenses	(3,514)	(6,204)	(11,907)	(16,697)
Income from operations	64,560	49,248	167,494	120,896
Interest and other income, net	1,941	1,416	2,442	2,802
Foreign exchange (loss)/gain	(514)	(77)	1,069	(1,470)
Income before provision for/(benefit from) income taxes	\$65,987	\$50,587	\$171,005	\$122,228

Geographic Area Information

Long-lived assets include property and equipment, net of accumulated depreciation and amortization. Geographical information about the Company's long-lived assets based on physical location of the assets is presented below:

	As of September 30, 2018	As of December 31, 2017
Belarus	\$ 48,728	\$ 49,866
United States	11,542	3,371
Russia	10,279	9,617
Ukraine	8,529	6,995
India	6,783	2,698
Hungary	3,198	3,901
China	2,830	2,608
Other locations	7,576	7,363
Total	\$ 99,465	\$ 86,419

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The table below presents information about the Company's revenues by client location for the three and nine months ended September 30, 2018 and 2017.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
United States	\$266,065	\$202,364	\$736,579	\$571,513
United Kingdom	50,482	48,471	152,315	141,177
Switzerland	35,524	33,185	105,396	90,400
Germany	20,732	16,053	60,331	42,291
Canada	18,008	15,711	51,391	41,854
Netherlands	17,031	14,118	51,934	35,345
Russia	15,609	14,079	51,930	40,614
Other locations	44,735	33,542	128,105	87,957
Total	\$468,186	\$377,523	\$1,337,981	\$1,051,151

13. SUBSEQUENT EVENTS

On November 1, 2018, the Company acquired 100% of the equity interests of Think Limited, a digital transformation agency headquartered in London, UK. This acquisition is intended to strengthen EPAM's digital and organizational consulting capabilities in the UK and Western European markets and enhance the Company's global product and design offerings. The aggregate purchase price included approximately \$27,000 cash and up to approximately \$8,200 of contingent consideration subject to attainment of specified performance targets in the 12 months after the acquisition.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

You should read the following discussion and analysis of our financial condition and results of operations together with our Annual Report on Form 10-K for the year ended December 31, 2017 and the unaudited condensed consolidated financial statements and the related notes included elsewhere in this quarterly report. In addition to historical information, this discussion contains forward-looking statements that involve risks, uncertainties and assumptions that could cause actual results to differ materially from management's expectations. Factors that could cause such differences are discussed in the sections entitled "Forward-Looking Statements" in this item and "Part II. Item 1A. Risk Factors." We assume no obligation to update any of these forward-looking statements.

In this quarterly report, "EPAM," "EPAM Systems, Inc.," the "Company," "we," "us" and "our" refer to EPAM Systems, Inc. and its consolidated subsidiaries.

Executive Summary

We are a leading global provider of digital platform engineering and software development services offering specialized technological solutions to many of the world's leading organizations.

Our clients depend on us to solve their complex technical challenges and rely on our expertise in core engineering, advanced technology, digital engagement and intelligent enterprise development. We are continuously venturing into new industries to expand our core industry client base in software and technology, financial services, business information and media, travel and hospitality, retail and distribution, and life sciences and healthcare. Our teams of developers, architects, consultants, strategists, engineers, designers, and product experts have the capabilities and skill sets to deliver business results.

Our global delivery model and centralized support functions, combined with the benefits of scale from the shared use of fixed-cost resources, enhance our productivity levels and enable us to better manage the efficiency of our global operations. As a result, we have created a delivery base whereby our applications, tools, methodologies and infrastructure allow us to seamlessly deliver services and solutions from our delivery centers to global clients across all geographies, further strengthening our relationships with them.

Through increased specialization in focused verticals and a continued emphasis on strategic partnerships, we are leveraging our roots in software engineering to grow as a recognized brand in software development and end-to-end digital transformation services for our clients.

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Year-to-Date 2018 Developments and Trends

Our results for the first nine months of 2018 reflect continued growth and execution of our strategy. During the first nine months of 2018, our revenues were \$1,338.0 million, an increase of 27.3% over \$1,051.2 million reported for the same period of 2017. Our performance remained strong across our key verticals, led by the Financial Services vertical which grew \$68.8 million or 28.4% during the first nine months of 2018 as compared to the same period of 2017. Results for the nine months ended September 30, 2018 were favorably impacted by the recognition of \$25.1 million of net deferred tax assets as a result of the election to disregard as separate entities for U.S. tax purposes certain foreign subsidiaries of the Company as well as a \$4.9 million reduction of the provisional income tax payable associated with the U.S. Tax Act's one-time transition tax on accumulated foreign subsidiary earnings not previously subject to U.S. income tax.

We have built a diversified portfolio across numerous verticals, geographies and service offerings. Our account management teams work to expand the scope and size of our engagements with existing customers while at the same time we grow our customer base through our business development efforts and our strategic acquisitions. On March 15, 2018, we completed the acquisition of Continuum, an innovation design firm. The acquisition strengthens EPAM's innovation consulting capabilities and enhances our existing digital and service design practices.

Summary of Results of Operations

The following table presents a summary of our results of operations for the three and nine months ended September 30, 2018 and 2017:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2018		2017		2018		2017	
	(in thousands, except per share data and percentages)							
Revenues	\$468,186	100.0 %	\$377,523	100.0 %	\$1,337,981	100.0 %	\$1,051,151	100.0 %
Income from operations	\$64,560	13.8 %	\$49,248	13.0 %	\$167,494	12.5 %	\$120,896	11.5 %
Net income	\$65,618	14.0 %	\$42,634	11.3 %	\$180,291	13.5 %	\$103,634	9.9 %
Effective tax rate	0.6	%	15.7	%	(5.4	)%	15.2	%
Diluted earnings per share	\$1.15		\$0.77		\$3.19		\$1.90	

The key highlights of our consolidated results for the three and nine months ended September 30, 2018, as compared to the corresponding periods of 2017, were as follows:

Revenues for the third quarter of 2018 were \$468.2 million, or a 24.0% increase from \$377.5 million reported in the same period last year, negatively impacted by \$5.3 million or 1.4% due to changes in certain foreign currency exchange rates as compared to the corresponding period last year. Revenues for the first nine months of 2018 were \$1,338.0 million, or a 27.3% increase from \$1,051.2 million reported in the corresponding period last year, positively impacted by \$11.7 million or 1.1% due to changes in certain foreign currency exchange rates as compared to the corresponding period last year.

Income from operations grew 31.1% and 38.5% during the three and nine months ended September 30, 2018, respectively, as compared to the corresponding periods in 2017. Expressed as a percentage of revenues, income from operations for the third quarter of 2018 was 13.8% compared to 13.0% in the third quarter last year and 12.5% and 11.5% for the first nine months of 2018 and 2017, respectively. The increase as a percentage of revenues was primarily driven by an improvement in selling, general and administrative expenses as a percentage of revenues partially offset by an increase in cost of revenues as a percentage of revenues as compared to the same periods last year.

Our effective tax rate was (5.4)% in the first nine months of 2018 compared to 15.2% in the corresponding period last year. The interim provision for/(benefit from) income taxes in the nine months ended September 30, 2018 was favorably impacted by the recognition of \$25.1 million of net deferred tax assets as a result of the election to disregard as separate entities for U.S. tax purposes certain foreign subsidiaries of the Company.

Net income increased 53.9% to \$65.6 million for the three months ended September 30, 2018, compared to \$42.6 million reported in the corresponding period last year. Net income for the same period was 14.0% as a percentage of revenue, an increase of 2.7% compared to 11.3% reported in the corresponding period of 2017. This was largely

driven by the improved effective tax rate as well as the improvement in income from operations as a percentage of revenue. Net income grew 74.0% during the nine months ended September 30, 2018 as compared to the corresponding period last year primarily due to the improvement in income from operations and the effective tax rate.

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Diluted earnings per share was \$1.15 and \$3.19 for the three and nine months ended September 30, 2018, respectively, an increase of \$0.38 and \$1.29 compared to the corresponding periods last year.

Cash provided by operations increased \$47.5 million, or 39.1%, to \$169.1 million during the nine months ended September 30, 2018 as compared to the corresponding period last year.

The operating results in any period are not necessarily indicative of the results that may be expected for any future period.

Critical Accounting Policies

The discussion and analysis of our financial position and results of operations is based on our condensed consolidated financial statements which have been prepared in accordance with U.S. GAAP. The preparation of these condensed consolidated financial statements in accordance with U.S. GAAP requires us to make estimates and judgments that may affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On a recurring basis, we evaluate our estimates and judgments, including those related to revenue recognition and related allowances, impairments of long-lived assets including intangible assets and goodwill, income taxes including the valuation allowance for deferred tax assets, and stock-based compensation. Actual results may differ materially from these estimates under different assumptions and conditions. In addition, our reported financial condition and results of operations could vary due to a change in the application of a particular accounting standard.

Other than as discussed below, there have been no material changes to our critical accounting policies or in the underlying accounting assumptions and estimates used in such policies during the three and nine months ended September 30, 2018. For further information, refer to our summary of significant accounting policies and estimates in our Annual Report on Form 10-K filed for the year ended December 31, 2017.

Revenues — The Company recognizes revenues when control of goods or services is passed to a customer in an amount that reflects the consideration we expect to be entitled to in exchange for those goods or services. Such control may be transferred over time or at a point in time depending on satisfaction of obligations stipulated by the contract.

Consideration expected to be received may consist of both fixed and variable components and is allocated to each separately identifiable performance obligation based on the performance obligation's relative standalone selling price. Variable consideration usually takes the form of volume-based discounts, service level credits, price concessions or incentives. Determining the estimated amount of such variable consideration involves assumptions and judgment that can have an impact on the amount of revenues reported.

We derive our revenues from a variety of service offerings, which represent specific competencies of our IT professionals. Fees for these contracts may be in the form of time-and-materials or fixed-price arrangements. The majority of our revenues are generated under time-and-material contracts which are billed using hourly, daily or monthly rates to determine the amounts to be charged directly to the client. We apply a practical expedient and revenues related to time-and-material contracts are recognized based on the right to invoice for services performed. Fixed-price contracts include maintenance and support arrangements, which may exceed one year in duration, as well as application development arrangements. Maintenance and support arrangements generally relate to the provision of ongoing services. Revenues for such agreements are recognized ratably over the expected service period. Application development arrangements are accounted for using input or output methods for measuring the progress towards satisfaction of the performance obligation. Input methods are used only when there is a direct correlation between hours incurred and the end product delivered. Assumptions, risks and uncertainties inherent in the estimates used to measure progress could affect the amount of revenues, receivables and deferred revenues at each reporting period. Revenues from licenses which have significant stand-alone functionality are recognized at a point in time when control of the license is transferred to the customer. Revenues from licenses which do not have stand-alone functionality are recognized over time.

If there is an uncertainty about the receipt of payment for the services, revenue is deferred until the uncertainty is sufficiently resolved. We apply a practical expedient and do not assess the existence of a significant financing component if the period between when we transfer the service to a customer and when the customer pays for that service is one year or less.

EPAM reports gross reimbursable “out-of-pocket” expenses incurred as both revenues and cost of revenues in the consolidated statements of income and comprehensive income.

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Stock-Based Compensation — Effective January 1, 2018, we changed the methodology for estimating volatility used in the Black-Scholes option valuation model. Prior to January 1, 2018, we estimated the volatility of our common stock by using the historical volatility of peer public companies including the Company's historical volatility. In the first quarter of 2018, we began exclusively using our own historical volatility as we believe this is a more accurate estimate of future volatility of the price of EPAM's common stock. We did not change the methodology for estimating any other Black-Scholes option valuation model assumptions as disclosed in Note 13 "Stock-Based Compensation" in the audited consolidated financial statements included in the Annual Report on Form 10-K for the fiscal year ended December 31, 2017.

Results of Operations

The following table sets forth a summary of our consolidated results of operations for the periods indicated. This information should be read together with our unaudited condensed consolidated financial statements and related notes included elsewhere in this quarterly report. The operating results in any period are not necessarily indicative of the results that may be expected for any future period.

	Three Months Ended September 30, 2018			2017			Nine Months Ended September 30, 2018			2017		
	(in thousands, except percentages)											
Revenues	\$468,186	100.0	%	\$377,523	100.0	%	\$1,337,981	100.0	%	\$1,051,151	100.0	%
Operating expenses:												
Cost of revenues												
(exclusive of depreciation and amortization) ⁽¹⁾	301,081	64.3	%	239,369	63.4	%	867,890	64.9	%	667,231	63.5	%
Selling, general and administrative expenses ⁽²⁾	92,490	19.8	%	81,190	21.5	%	272,110	20.3	%	240,062	22.8	%
Depreciation and amortization expense	9,319	2.0	%	7,174	1.9	%	26,457	2.0	%	20,866	2.0	%
Other operating expenses, net	736	0.1	%	542	0.2	%	4,030	0.3	%	2,096	0.2	%
Income from operations	64,560	13.8	%	49,248	13.0	%	167,494	12.5	%	120,896	11.5	%
Interest and other income, net	1,941	0.4	%	1,416	0.4	%	2,442	0.2	%	2,802	0.2	%
Foreign exchange (loss)/gain	(514)	(0.1)	%	(77)	—	%	1,069	0.1	%	(1,470)	(0.1)	%
Income before provision for/(benefit from) income taxes	65,987	14.1	%	50,587	13.4	%	171,005	12.8	%	122,228	11.6	%
Provision for/(benefit from) income taxes	369	0.1	%	7,953	2.1	%	(9,286)	(0.7)	%	18,594	1.7	%
Net income	\$65,618	14.0	%	\$42,634	11.3	%	\$180,291	13.5	%	\$103,634	9.9	%
Effective tax rate	0.6	%		15.7	%		(5.4)	%		15.2	%	
Diluted earnings per share	\$1.15			\$0.77			\$3.19			\$1.90		

(1) Includes \$7,492 and \$4,913 of stock-based compensation expense for the three months ended September 30, 2018 and 2017, respectively, and \$22,835 and \$14,452 of stock-based compensation expense for the nine months ended

September 30, 2018 and 2017, respectively.

Includes \$7,838 and \$6,304 of stock-based compensation expense for the three months ended September 30, 2018 (2) and 2017, respectively, and \$23,901 and \$25,468 of stock-based compensation expense for the nine months ended September 30, 2018 and 2017, respectively.

Consolidated Results Review

Revenues

We continue to expand our presence in multiple geographies and verticals, both organically and through acquisitions. During the three months ended September 30, 2018, our total revenues grew 24.0% over the corresponding period in 2017 to \$468.2 million. This growth results from our ability to retain existing customers and increase the level of services we provide to them and our ability to produce revenues from new customer relationships. Client concentration continued to decrease with revenues from our top five, top ten and top twenty clients declining as a percentage of total revenues for the three months ended September 30, 2018 as compared to the same period last year. Revenue has been positively impacted from the acquisition of Continuum, which contributed 2.2% to our revenue growth, and negatively impacted by the fluctuations in foreign currency, which reduced our revenue growth by 1.4% during the three months ended September 30, 2018 as compared to the corresponding period last year.

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During the nine months ended September 30, 2018, our total revenues grew 27.3% over the corresponding period in 2017. The acquisition of Continuum contributed 1.8% and fluctuations in foreign currency contributed 1.1% to our revenue growth during the nine months ended September 30, 2018 as compared to the corresponding period last year. Revenues by client location for the three and nine months ended September 30, 2018 and 2017 were as follows:

	Three Months Ended September 30,						Nine Months Ended September 30,					
	2018			2017			2018			2017		
	(in thousands, except percentages)											
North America	\$284,077	60.7	%	\$218,075	57.8	%	\$787,974	58.9	%	\$613,367	58.4	%
Europe	152,235	32.5	%	135,500	35.9	%	455,124	34.0	%	371,014	35.3	%
CIS ⁽¹⁾	18,534	4.0	%	15,987	4.2	%	59,725	4.5	%	45,295	4.3	%
APAC ⁽¹⁾	13,340	2.8	%	7,961	2.1	%	35,158	2.6	%	21,475	2.0	%
Revenues	\$468,186	100.0	%	\$377,523	100.0	%	\$1,337,981	100.0	%	\$1,051,151	100.0	%

offshore development centers are dedicated to specific clients or projects. Our staff utilization also depends on the general economy and its effect on our clients and their business decisions regarding the use of our services.

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During the three months ended September 30, 2018, cost of revenues (exclusive of depreciation and amortization) was \$301.1 million representing an increase of 25.8% from \$239.4 million in the corresponding period of 2017. The increase was primarily due to an increase in compensation costs largely driven by the 17.6% growth in the average number of production headcount and a higher level of accrued variable compensation during the three months ended September 30, 2018 as compared to the same period in 2017 partially offset by a 1.8% impact from changing foreign currency exchange rates. Expressed as a percentage of revenues, cost of revenues (exclusive of depreciation and amortization) was 64.3% and 63.4% in the third quarter of 2018 and 2017, respectively. The year-over-year increase reflects a higher level of accrued variable compensation based on the stronger relative performance in 2018 as well as increased stock compensation expense.

During the nine months ended September 30, 2018, cost of revenues (exclusive of depreciation and amortization) was \$867.9 million representing an increase of 30.1% from \$667.2 million in the corresponding period of 2017. The increase was primarily due to an increase in compensation costs largely driven by the 18.9% growth in the average number of production headcount and a higher level of accrued variable compensation during the first nine months of 2018 as compared to the same period in 2017 as well as a 1.0% impact from changing foreign currency exchange rates. Expressed as a percentage of revenues, cost of revenues (exclusive of depreciation and amortization) was 64.9% and 63.5% for the nine months ended September 30, 2018 and 2017, respectively. The year-over-year increase reflects a higher level of accrued variable compensation based on the stronger relative performance in 2018, the impact from lower utilization rates, and increased stock compensation expense.

Selling, General and Administrative Expenses

Selling, general and administrative expenses represent expenses associated with promoting and selling our services and general and administrative functions of our business. These expenses include the costs of salaries and fringe benefits, stock-based compensation, commissions, travel, talent acquisition and development, legal and audit services, insurance, operating leases, advertising and other promotional activities. In addition, we pay a membership fee of 1% of revenues generated in Belarus to the administrative organization of the Belarus Hi-Tech Park.

During the three months ended September 30, 2018, selling, general and administrative expenses were \$92.5 million representing an increase of 13.9% as compared to \$81.2 million in the corresponding period of 2017. The increase in selling, general and administrative expenses was primarily driven by a \$5.9 million increase in personnel-related costs including stock-based compensation expense and a \$4.0 million increase in facilities and infrastructure related expenses to support our growth. Expressed as a percentage of revenue, selling, general and administrative expenses decreased 1.7% to 19.8% for the three months ended September 30, 2018 as compared to the same period from the prior year primarily due to the slower growth in selling, general and administrative expenses as compared to revenues in the period.

During the nine months ended September 30, 2018, selling, general and administrative expenses were \$272.1 million representing an increase of 13.3% as compared to \$240.1 million reported in the corresponding period of 2017. Expressed as a percentage of revenue, selling, general and administrative expenses decreased 2.5% to 20.3% for the nine months ended September 30, 2018 as compared to the same period from the prior year. The decrease was primarily driven by the slower growth of 10.5% in personnel-related costs including stock-based compensation expense as compared to revenue growth of 27.3%.

Depreciation and Amortization Expense

During the three and nine months ended September 30, 2018, depreciation and amortization expense was \$9.3 million and \$26.5 million, respectively, as compared to \$7.2 million and \$20.9 million, respectively in the corresponding periods last year. The increase in depreciation and amortization expense is primarily the result of increased investment in computer equipment used by our employees as well as the acquisition of Continuum, which contributed fixed and intangible assets. Depreciation and amortization expense includes amortization of acquired intangible assets, all of which have finite useful lives. Expressed as a percentage of revenues, depreciation and amortization expense remained consistent during the three and nine months ended September 30, 2018 as compared to the corresponding periods of 2017.

Other Operating Expenses, net

Other operating expenses, net include lease exit costs, severance, certain write-offs and recoveries. There were no material changes in other operating expenses, net during the three and nine months ended September 30, 2018 as compared to the same periods in 2017.

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Provision for/(Benefit from) Income Taxes

Determining the consolidated provision for income tax expense, deferred income tax assets and liabilities and related valuation allowances, if any, involves judgment. In determining our quarterly provision for income taxes, we use an estimated annual effective tax rate which is based on expected annual profit before tax, statutory tax rates and tax planning opportunities available in the various jurisdictions in which we operate. Certain significant or unusual items are separately recognized in the quarter in which they occur and can be a source of variability in the effective tax rates from quarter to quarter. We also consider other factors that may contribute, favorably or unfavorably, to the overall effective tax rate in 2018 and beyond. These factors include statutory tax rate changes in the countries where we operate and excess tax benefits upon vesting or exercise of equity awards.

As a global company, we are required to calculate and provide for income taxes in each of the jurisdictions in which we operate. Our effective tax rate was 0.6% and (5.4)% for the three and nine months ended September 30, 2018, respectively, and 15.7% and 15.2% for the three and nine months ended September 30, 2017, respectively.

The interim provision for/(benefit from) income taxes in the three months ended September 30, 2018 was unfavorably impacted by the recognition of \$0.3 million of net deferred tax liabilities and the interim provision for/(benefit from) income taxes in the nine months ended September 30, 2018 was favorably impacted by the recognition of \$25.1 million of net deferred tax assets as a result of the election to disregard as separate entities for U.S. tax purposes certain foreign subsidiaries of the Company.

Due to the timing of the enactment and the complexity involved in applying the provisions of the U.S. Tax Act, we made reasonable estimates of the effects and recorded provisional amounts in our financial statements as of December 31, 2017. As the Company collects and prepares necessary data and interprets the U.S. Tax Act and any additional guidance issued by the U.S. Treasury Department, the IRS, and other standard-setting bodies, and further refines the calculations, we may make adjustments to the provisional amounts recorded. Any adjustments during this measurement period will be included in the provision for income taxes in the reporting period when such adjustments are determined. During the three and nine months ended September 30, 2018, the Company further refined its estimate and recorded net provisional reductions of \$7.1 million and \$4.9 million, respectively, associated with the provisional charge for the one-time transition tax on accumulated foreign subsidiary earnings not previously subject to U.S. income tax which now totals \$59.4 million. The provisional reductions were primarily driven by a decrease in repatriation taxes as a result of the Company completing its analysis of the earnings of relevant foreign subsidiaries in the third quarter of 2018. Of this amount, \$49.1 million is classified as Taxes payable, noncurrent as of September 30, 2018. The Company continues to analyze the impact of certain foreign tax credits, continues to assess the application of certain state income tax laws and expects to complete its analysis during the fourth quarter of 2018.

Foreign Exchange Gain/(Loss)

For discussion of the impact of foreign exchange fluctuations see “Item 3. Quantitative and Qualitative Disclosures About Market Risk.”

Interest and Other Income, net

Interest and other income, net includes interest earned on cash and cash equivalents and employee housing loans, gains and losses from certain financial instruments, interest expense related to our revolving credit facility and changes in the fair value of contingent consideration. There were no material changes in interest and other income, net during the three and nine months ended September 30, 2018 as compared to the same periods in 2017.

Effects of Inflation

Economies in CIS countries, particularly Belarus, Russia, Kazakhstan and Ukraine, have periodically experienced high rates of inflation. Periods of higher inflation may slow economic growth in those countries and as a result negatively impact the business of our existing clients and decrease demand for our services. Inflation may also increase some of our expenses such as wages. We do not rely on borrowed funds for operations in those locations; therefore, increases in interest rates typical for inflationary environments do not currently pose a risk to our business. While inflation may impact our results of operations and financial condition and it is difficult to accurately measure the impact of inflation, we believe the effects of inflation on our results of operations and financial condition are not significant.

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Results by Business Segment

Our operations consist of three reportable segments: North America, Europe, and Russia. The segments represent components of EPAM for which separate financial information is available and is used on a regular basis by our chief executive officer, who is also our chief operating decision maker (“CODM”) to determine how to allocate resources and evaluate performance. Our CODM makes business decisions based on segment revenues and operating profit.

Segment operating profit is defined as income from operations before unallocated costs. Expenses included in segment operating profit consist principally of direct selling and delivery costs as well as an allocation of certain shared services expenses and facilities costs. These shared expenses include Delivery, Recruitment and Development, Sales and Marketing, and support functions such as IT, Finance, Legal, and Human Resources. Generally, shared expenses are allocated based on measurable drivers of expense, e.g., recorded hours or headcount. Certain expenses that are not controllable at the segment level are not allocated to specific segments.

Our reportable segments are based on managerial responsibility for a particular client. Because managerial responsibility for a particular client relationship generally correlates with the client’s geographic location, there is a high degree of similarity between client locations and the geographic boundaries of our reportable segments. In some specific cases, however, managerial responsibility for a particular client is assigned to a management team in another region, usually based on the strength of the relationship between client executives and particular members of our senior management team. In such cases, the client’s activity would be reported through the management team’s reportable segment.

Segment revenues from external clients and segment operating profit, before unallocated expenses, for the North America, Europe, and Russia reportable segments for the three and nine months ended September 30, 2018 and 2017 were as follows:

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2018	2017	2018	2017
	(in thousands)			
Segment revenues:				
North America	\$280,838	\$206,389	\$769,137	\$578,717
Europe	171,482	157,446	516,320	431,472
Russia	16,208	14,455	53,374	41,825
Total segment revenues	\$468,528	\$378,290	\$1,338,831	\$1,052,014
Segment operating profit:				
North America	\$60,763	\$45,529	\$155,944	\$126,243
Europe	28,871	25,984	84,329	66,453
Russia	543	1,685	8,211	7,129
Total segment operating profit	\$90,177	\$73,198	\$248,484	\$199,825

North America Segment

During the three months ended September 30, 2018, revenues for the North America segment increased \$74.4 million, or 36.1%, compared to the same period last year and segment operating profits increased \$15.2 million, or 33.5%, compared to the same period last year. During the three months ended September 30, 2018, revenues from our North America segment were 59.9% of total segment revenues, an increase from 54.6% reported in the corresponding period of 2017. The North America segment’s operating profit margin decreased to 21.6% during the third quarter of 2018 from 22.1% in the third quarter of 2017.

During the nine months ended September 30, 2018, revenues for the North America segment increased \$190.4 million, or 32.9%, compared to the same period last year and segment operating profit increased \$29.7 million, or 23.5%, compared to the same period last year. During the nine months ended September 30, 2018 and 2017, revenues from our North America segment were 57.4% and 55.0% of total segment revenues, respectively. The North America segment’s operating profit margin decreased to 20.3% during the nine months ended September 30, 2018 from 21.8% in the corresponding period of 2017. This decrease reflects the impact from a higher level of accrued variable

compensation based on the stronger relative performance in 2018.

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The following table presents North America segment revenues by industry vertical for the periods indicated:

	Three Months Ended September 30,					Nine Months Ended September 30,				
	2018		2017		Change	2018		2017		Change
	(in thousands, except percentages)				Dollars Percentage	(in thousands, except percentages)				Dollars Percentage
Industry Vertical										
Software & Hi-Tech	\$68,572	\$54,010	\$14,562	27.0	%	\$193,672	\$155,238	\$38,434	24.8	%
Business Information & Media	64,152	47,682	16,470	34.5	%	181,021	138,757	42,264	30.5	%
Travel & Consumer	45,690	39,118	6,572	16.8	%	133,481	109,039	24,442	22.4	%
Life Sciences & Healthcare	39,550	27,668	11,882	42.9	%	99,893	78,067	21,826	28.0	%
Financial Services	30,488	17,149	13,339	77.8	%	79,176	45,900	33,276	72.5	%
Emerging Verticals	32,386	20,762	11,624	56.0	%	81,894	51,716	30,178	58.4	%
Revenues	\$280,838	\$206,389	\$74,449	36.1	%	\$769,137	\$578,717	\$190,420	32.9	%

Software & Hi-Tech remained the largest industry vertical in the North America segment during the third quarter and the first nine months of 2018. It grew 27.0% and 24.8% during the three and nine months ended September 30, 2018, respectively, as compared to the corresponding periods from the prior year, which was a result of the continued focus on working with our technology clients and partners. The revenues from the Financial Services and Emerging Verticals grew in excess of 50% during the three and nine months ended September 30, 2018 compared to the same periods from the prior year substantially driven by customers we began serving in the past 24 months.

Europe Segment

During the three months ended September 30, 2018, Europe's segment revenues were \$171.5 million, representing an increase of \$14.0 million, or 8.9%, from the same period last year negatively impacted by changes in foreign currency exchange rates. During the three months ended September 30, 2018 and 2017, Europe's segment revenues accounted for 36.6% of total segment revenues. Compared to the third quarter of 2017, the segment's operating profit increased \$2.9 million, or 11.1%, to \$28.9 million.

During the nine months ended September 30, 2018, revenues for the Europe segment increased \$84.8 million, or 19.7%, compared to the same period last year and segment operating profit increased \$17.9 million, or 26.9%, compared to the same period last year. During the nine months ended September 30, 2018 and 2017, revenues from our Europe segment were 38.6% and 41.0% of total segment revenues, respectively. As a percentage of Europe segment revenues, the Europe segment's operating profit increased to 16.3% during the nine months ended September 30, 2018 from 15.4% in the corresponding period of 2017.

The following table presents Europe segment revenues by industry vertical for the periods indicated:

	Three Months Ended September 30,					Nine Months Ended September 30,				
			Change					Change		
	2018	2017	Dollars	Percentage		2018	2017	Dollars	Percentage	
Industry Vertical	(in thousands, except percentages)					(in thousands, except percentages)				
Financial Services	\$61,713	\$62,879	\$(1,166)	(1.9)	%	\$190,027	\$172,251	\$17,776	10.3	%
Travel & Consumer	53,634	41,815	11,819	28.3	%	155,208	116,614	38,594	33.1	%
Software & Hi-Tech	19,035	18,188	847	4.7	%	59,186	51,795	7,391	14.3	%
Business Information & Media	17,650	16,641	1,009	6.1	%	54,637	46,203	8,434	18.3	%
Life Sciences & Healthcare	5,078	4,116	962	23.4	%	15,550	9,660	5,890	61.0	%
Emerging Verticals	14,372	13,807	565	4.1	%	41,712	34,949	6,763	19.4	%
Revenues	\$171.482	\$157.446	\$14.036	8.9	%	\$516.320	\$431.472	\$84.848	19.7	%

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The Europe segment benefited from strong growth of the Travel & Consumer vertical of 28.3% and 33.1% during the three and nine months ended September 30, 2018, respectively, as compared to corresponding periods of 2017.

Financial Services remained the largest industry vertical in the Europe segment during the three and nine months ended September 30, 2018. Revenues in Financial Services decreased during the three months ended September 30, 2018 as compared to the three months ended September 30, 2017 primarily due to decreasing revenues from certain customers outside of our top 5 customers.

Russia Segment

During the three months ended September 30, 2018, revenues from our Russia segment accounted for 3.5% of total segment revenues, and segment revenues increased \$1.8 million, or 12.1%, as compared to the corresponding period last year. During the three months ended September 30, 2018, operating profit of the Russia segment was \$0.5 million, representing a decrease of \$1.1 million, or 67.8%, as compared to the corresponding period last year.

During the nine months ended September 30, 2018, revenues from our Russia segment accounted for 4.0% of total segment revenues, and segment revenues increased \$11.5 million, or 27.6%, as compared to the corresponding period last year. During the nine months ended September 30, 2018, operating profit of the Russia segment was \$8.2 million, representing an increase of \$1.1 million, or 15.2%, as compared to the corresponding period last year.

The following table presents Russia segment revenues by industry vertical for the periods indicated:

Industry Vertical	Three Months					Nine Months				
	Ended September		Change			Ended September		Change		
	2018	2017	Dollars	Percentage		2018	2017	Dollars	Percentage	
	(in thousands, except percentages)					(in thousands, except percentages)				
Financial Services	\$ 12,786	\$ 9,268	\$ 3,518	38.0	%	\$ 43,102	\$ 25,194	\$ 17,908	71.1	%
Travel & Consumer	1,891	2,213	(322)	(14.6	)%	5,356	6,954	(1,598)	(23.0)%
Software & Hi-Tech	569	1,219	(650)	(53.3	)%	1,957	4,411	(2,454)	(55.6)%
Business Information & Media	—	—	—	—	%	—	43	(43)	(100.0)%
Life Sciences & Healthcare	12	—	12	—	%	12	26	(14)	(53.8)%
Emerging Verticals	950	1,755	(805)	(45.9	)%	2,947	5,197	(2,250)	(43.3)%
Revenues	\$ 16,208	\$ 14,455	\$ 1,753	12.1	%	\$ 53,374	\$ 41,825	\$ 11,549	27.6	%

Currency fluctuations of the Russian ruble typically impact the results in the Russia segment. Ongoing economic and geo-political uncertainty in the region and the volatility of the Russian ruble can significantly impact reported revenues in this geography. We continue to monitor geo-political forces, economic and trade sanctions, and other issues involving this region.

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Liquidity and Capital Resources

Capital Resources

Historically, cash generated from operations has been our primary source of cash to fund operations and investments to support the growth of our business. As of September 30, 2018, our principal sources of liquidity were cash and cash equivalents totaling \$685.1 million and \$274.6 million of available borrowings under our revolving line of credit. Many of our operations are conducted outside the United States and as of September 30, 2018, \$417.8 million of our total cash, including restricted cash, was held internationally. Of this amount, \$219.3 million was held in CIS countries including \$157.1 million in Belarus. Banking and other financial systems in the CIS region are less established and regulated than in some more developed markets, and bank deposits made by corporate entities in the CIS region are not insured. Our subsidiaries in the CIS and APAC regions do not maintain significant balances denominated in currencies other than U.S. dollars.

As part of our ongoing liquidity assessments, we regularly monitor the mix of domestic and international cash flows and cash balances and we may decide to repatriate some or all of our funds to the United States. If we decide to remit funds to the United States in the form of dividends, up to \$283.1 million, including the cash held in Belarus, would be subject to foreign withholding taxes. As of September 30, 2018, we have recognized a deferred tax liability of \$1.9 million for withholding taxes associated with \$38.0 million of unremitted earnings in Belarus. We believe that our available cash and cash equivalents held in the United States and cash flow to be generated from domestic operations will be sufficient to fund our domestic operations and obligations for the foreseeable future.

Our ability to expand and grow our business in accordance with current plans and to meet our long-term capital requirements will depend on many factors, including the rate at which our cash flows increase or decrease and the availability of public and private debt and equity financing. We may require additional cash resources due to changing business conditions

or other future developments, including any investments or acquisitions we may decide to pursue. If our resources become insufficient to satisfy our cash requirements, we may seek to sell additional equity or debt securities or obtain another credit facility.

Cash Flows

The following table summarizes our cash flows for the periods indicated:

	Nine Months Ended	
	September 30,	
	2018	2017
	(in thousands)	
Condensed Consolidated Statements of Cash Flow Data:		
Net cash provided by operating activities	\$ 169,088	\$ 121,580
Net cash used in investing activities	(77,833)	(24,124)
Net cash provided by financing activities	20,851	40,216
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(8,660)	10,435
Net increase in cash, cash equivalents and restricted cash	103,446	148,107
Cash, cash equivalents and restricted cash, beginning of period	582,855	364,664
Cash, cash equivalents and restricted cash, end of period	\$686,301	\$512,771

Operating Activities

Net cash provided by operating activities during the nine months ended September 30, 2018 increased by \$47.5 million, compared to the corresponding period of 2017 primarily driven by the \$76.7 million increase in net income partially offset by the payout of a higher level of variable compensation related to 2017 performance and a non-cash increase in net deferred tax assets of \$25.1 million as a result of the election to disregard as separate entities for U.S. tax purposes certain foreign subsidiaries of the Company.

Investing Activities

Net cash used in investing activities during the nine months ended September 30, 2018 was \$77.8 million compared to \$24.1 million used in the same period in 2017. During the first nine months of 2018, the increase in cash used in investing activities was primarily attributable to the net \$50.3 million cash used to acquire Continuum and capital

expenditures, which increased by \$10.6 million compared to the same period last year.

Financing Activities

Net cash provided by financing activities was \$20.9 million in the first nine months of 2018 compared to \$40.2 million in the same period of 2017. During the first nine months of 2018, net cash received from the exercises of stock options issued under our long-term incentive plans was \$32.0 million, a decrease of \$12.3 million from the \$44.3 million received during the same period last year.

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Contractual Obligations and Future Capital Requirements

Contractual Obligations

Set forth below is information concerning our significant fixed and determinable contractual obligations as of September 30, 2018.

	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
	(in thousands)				
Operating lease obligations	\$227,999	\$41,383	\$65,594	\$42,744	\$78,278
Long-term incentive plan payouts ⁽¹⁾	41,924	15,315	23,709	2,900	—
Long-term debt obligation ⁽²⁾	27,631	731	1,431	25,469	—
U.S. Tax Act transition tax ⁽³⁾	54,748	5,631	9,356	13,449	26,312
Total contractual obligations	\$352,302	\$63,060	\$100,090	\$84,562	\$104,590

(1) We estimate our future obligations for long-term incentive plan payouts by assuming the closing price per share of our common stock at September 30, 2018 remains constant into the future. This is an estimate as actual prices will vary over time.

(2) We estimate our future obligations for interest on our floating rate 2017 Credit Facility by assuming the weighted average interest rates in effect on each floating rate debt obligation at September 30, 2018 remain constant into the future. This is an estimate, as actual rates will vary over time. In addition, for the 2017 Credit Facility, we assume that the balance outstanding as of September 30, 2018 remains the same for the remaining term of the agreement. The actual balance outstanding under our 2017 Credit Facility may fluctuate significantly in future periods, depending on the availability of cash flow from operations and future investing and financing considerations.

(3) The provisional U.S. Tax Act transition tax on undistributed foreign earnings is payable over eight years. See Note 8 “Income Taxes” to our unaudited condensed consolidated financial statements.

As of September 30, 2018, we had \$1.1 million of unrecognized tax benefits for which we are unable to make a reliable estimate of the eventual cash flows by period that may be required to settle these matters.

Future Capital Requirements

We believe that our existing cash and cash equivalents combined with our expected cash flow from operations will be sufficient to meet our projected operating and capital expenditure requirements for at least the next twelve months and that we possess the financial flexibility to execute our strategic objectives, including the ability to make acquisitions and strategic investments in the foreseeable future. However, our ability to generate cash is subject to our performance, general economic conditions, industry trends and other factors. To the extent that existing cash and cash equivalents and operating cash flow are insufficient to fund our future activities and requirements, we may need to raise additional funds through public or private equity or debt financing. If we issue equity securities in order to raise additional funds, substantial dilution to existing stockholders may occur. If we raise cash through the issuance of additional indebtedness, we may be subject to additional contractual restrictions on our business. There is no assurance that we would be able to raise additional funds on favorable terms or at all.

Off-Balance Sheet Commitments and Arrangements

We do not have any obligations under guarantee contracts or other contractual arrangements that would constitute off-balance sheet arrangements other than as disclosed in Note 6 “Long-Term Debt” and Note 11 “Commitments and Contingencies” of our condensed consolidated financial statements in “Part I. Item 1. Financial Statements (Unaudited).” We have not entered into any transactions with unconsolidated entities whereby we have financial guarantees, subordinated retained interests, derivative instruments, or other contingent arrangements that expose us to material continuing risks, contingent liabilities, or any other obligation under a variable interest in an unconsolidated entity that provides financing, liquidity, market risk, or credit risk support to us, or engages in leasing, hedging, or research and development services with us.

Recent Accounting Pronouncements

See Note 1 “Summary of Significant Accounting Policies” to our unaudited condensed consolidated financial statements in “Part I. Item 1. Financial Statements (Unaudited)” for additional information.

This quarterly report on Form 10-Q contains estimates and forward-looking statements, principally in “Part I. Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Part II. Item 1A. Risk Factors.” Our estimates and forward-looking statements are mainly based on our current expectations and estimates of future events and trends, which affect or may affect our businesses and operations. Although we believe that these estimates and forward-looking statements are based upon reasonable assumptions, they are subject to several risks and uncertainties and are made in light of information currently available to us. Important factors, in addition to the factors described in this quarterly report, may adversely affect our results as indicated in forward-looking statements. You should read this quarterly report and the documents that we have filed as exhibits hereto completely and with the understanding that our actual future results may be materially different from what we expect. The words “may,” “will,” “should,” “could,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “predict,” “intend,” “potential,” “might,” “would,” “can” and other similar terms or other comparable terminology and similar words are intended to identify estimates and forward-looking statements. Estimates and forward-looking statements speak only as of the date they were made, and, except to the extent required by law, we undertake no obligation to update, to revise or to review any estimate and/or forward-looking statement because of new information, future events or other factors. Estimates and forward-looking statements involve risks and uncertainties and are not guarantees of future performance. As a result of the risks and uncertainties described above, the estimates and forward-looking statements discussed in this quarterly report might not occur and our future results, level of activity, performance or achievements may differ materially from those expressed in these forward-looking statements due to, including, but not limited to, the factors mentioned above, and the differences may be material and adverse. Because of these uncertainties, you should not place undue reliance on these forward-looking statements.

We are exposed to certain market risks in the ordinary course of our business. These risks primarily result from changes in concentration of credit risks, interest rates and foreign currency exchange rates. In addition, our international operations are subject to risks related to differing economic conditions, changes in political climate, differing tax structures, and other regulations and restrictions.

Financial instruments that potentially subject us to significant concentrations of credit risk consist primarily of cash and cash equivalents, accounts receivable and unbilled revenues.

We maintain our cash and cash equivalents and short-term investments with financial institutions. We believe that our credit policies reflect normal industry terms and business risk. We do not anticipate non-performance by the counterparties. We hold a significant balance of cash in banks in CIS countries. In this region, the banking sector remains subject to periodic instability, banking and other financial systems generally do not meet the banking standards of more developed markets, and bank deposits made by corporate entities are not insured. As of September 30, 2018, \$219.3 million of our total cash was held in CIS countries, of which \$157.1 million was held in Belarus. In this region, and particularly in Belarus, a banking crisis, bankruptcy or insolvency of banks that process or hold our funds, may result in the loss of our deposits or adversely affect our ability to complete banking transactions in the region, which could adversely affect our business and financial condition. Cash in other CIS locations is used for short-term operational needs and cash balances in those banks move with the needs of the entities.

Accounts receivable and unbilled revenues are generally dispersed across the Company's clients in proportion to revenues. There were no customers individually exceeding 10% of our accounts receivable or unbilled revenues as of September 30, 2018. There were no customers that accounted for more than 10% of total revenues during the three and nine months ended September 30, 2018 and 2017.

Our exposure to market risk is influenced by the changes in interest rates on our cash and cash equivalent deposits and paid on any outstanding balance on our borrowings, mainly under our 2017 Credit Facility, which is subject to a variety of rates depending on the type and timing of funds borrowed. We do not believe we are exposed to material direct risks associated with changes in interest rates related to these deposits and borrowings.

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Foreign Exchange Risk

Our global operations are conducted predominantly in U.S. dollars. Other than U.S. dollars, we generate revenues principally in euros, British pounds, Swiss francs, Canadian dollars and Russian rubles. Other than U.S. dollars, we incur expenditures principally in Russian rubles, Hungarian forints, Polish zlotys, British pounds, Swiss francs, euros, Indian rupees and Chinese yuan renminbi associated with the location of our delivery centers. As a result, currency fluctuations, specifically the depreciation of the euro, British pound, and Canadian dollar and the appreciation of Russian rubles, Hungarian forints, Polish zlotys, Chinese yuan renminbi and Indian rupees relative to the U.S. dollar, could negatively impact our results of operations.

During the quarter ended September 30, 2018, foreign exchange loss was \$0.5 million compared to a loss of \$0.1 million reported in the corresponding period last year. During the nine months ended September 30, 2018, foreign exchange gain was \$1.1 million compared to a loss of \$1.5 million in the corresponding period last year.

During the quarter ended September 30, 2018, approximately 35.0% of consolidated revenues and 39.2% of consolidated operating expenses were denominated in currencies other than the U.S. dollar.

During 2018, we implemented a hedging program through which we entered into a series of foreign exchange forward contracts that are designated as cash flow hedges of forecasted Russian ruble, Indian rupee and Polish zloty transactions. We entered into these foreign exchange contracts to hedge a portion of our forecasted foreign currency denominated operating expenses in the normal course of business and accordingly, they are not speculative in nature. As of September 30, 2018, the net unrealized loss from these hedges was \$2.7 million.

Management supplements results reported in accordance with United States generally accepted accounting principles, referred to as GAAP, with non-GAAP financial measures. Management believes these measures help illustrate underlying trends in our business and uses the measures to establish budgets and operational goals, communicated internally and externally, for managing our business and evaluating its performance. When important to management's analysis, operating results are compared on the basis of "constant currency", which is a non-GAAP financial measure. This measure excludes the effect of foreign currency exchange rate fluctuations by translating the current period revenues and expenses into U.S. dollars at the weighted average exchange rates of the prior period of comparison. During the third quarter of 2018, we reported revenue growth of 24.0% over the third quarter of 2017. Had our consolidated revenues been expressed in constant currency terms using the exchange rates in effect during the third quarter of 2017, we would have reported revenue growth of 25.4%. The revenues have been mainly impacted from the depreciation of the euro and Russian ruble relative to the U.S. dollar. During the third quarter of 2018, we reported net income growth of 53.9% over the third quarter of 2017. Had our consolidated results been expressed in constant currency terms using the exchange rates in effect during the third quarter of 2017, we would have reported net income growth of 52.6%. Net income has been most positively impacted by depreciation of the Russian ruble and Hungarian forint partially offset by the depreciation of the euro relative to the U.S. dollar.

Item 4. Controls and Procedures

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

Based on management's evaluation, with the participation of our Chief Executive Officer and Chief Financial Officer, as of the end of the period covered by this report, these officers have concluded that our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are effective to provide reasonable assurance that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and is accumulated and communicated to management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

There has been no change in our internal control over financial reporting during the quarter ended September 30, 2018 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

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PART II. OTHER INFORMATION

Item 1. Legal Proceedings

From time to time, we are involved in litigation and claims arising out of our operations in the normal course of business. We are not currently a party to any material legal proceeding. In addition, we are not aware of any material legal or governmental proceedings against us, or contemplated to be brought against us.

Item 1A. Risk Factors

There have been no material changes with respect to the risk factors disclosed in “Part I. Item 1A. Risk Factors” of our Annual Report on Form 10-K for the year ended December 31, 2017.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not Applicable.

Item 5. Other Information

None.

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Item 6. Exhibits

Exhibit Number	Description
31.1	<u>Certification of the Chief Executive Officer pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934</u>
31.2	<u>Certification of the Chief Financial Officer pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934</u>
32.1	<u>Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u>
32.2	<u>Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u>
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: November 5, 2018
EPAM SYSTEMS, INC.

By: /s/ Arkadiy Dobkin
Name: Arkadiy Dobkin
Title: Chairman, Chief Executive Officer and President
(principal executive officer)

By: /s/ Jason Peterson
Name: Jason Peterson
Title: Senior Vice President, Chief Financial Officer and Treasurer
(principal financial officer)